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**SECTION: INTERNATIONAL BUSINESSES AND EUROPEAN
INTEGRATION**

SUB-SECTION: INTERNATIONAL BUSINESSES

CONTINUING INTERNATIONAL TRADE LIBERALIZATION IN THE FINANCIAL CRISIS CONTEXT

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This research paper is based on an assessment of the effects of the recent financial crisis on the international trade and the way states and international organizations acted in this context. The importance of this research topic consists in identifying the way the international trade liberalization process has been affected by the financial crisis and the way anti-crisis measures deviated from the basic rules agreed under the aegis of WTO/GATT.

The intended purpose of the paper is to conduct a substantive assessment of undertaken actions by the various states aimed to mitigate crisis impact on anti-dumping investigations and measures. Precisely, it was assayed whether the international financial crisis has been an opportunity for WTO member states to plainly intervene in the economy and give up the commitments they made in the context of multilateral commercial negotiations. Considering the international, regional and national effects of the crisis the topic has been copiously elaborated on by economics literature. A number of anti-crisis measures were presented encouraging massive intervention in the economy, as well as actions, particularly of International Organizations according to which measures could be taken without deviating from globally agreed mechanisms and principles. In order to be able to find out which of these two options prevailed in actions undertaken by the states the types of international, regional or national anti-crisis measures were selected. Positions voiced by the World Trade Organization, United Nations Conference on Trade and Development (UNCTAD), European Union are rendered.

To answer the question about the way it has been responded in order to mitigate crisis effects, adopted anti-crisis measures were inventoried and their deviation from international rules was assessed.

One of the indicators used in the assessment of anti-crisis measures is the progress of the anti-dumping investigations and measures notified to WTO in the past 9 years for which data were available (2003-2009). The relevance of this period lies in the fact that it includes 5 pre-crisis years and 2 years when it was strongly evident.

It was found that the number of anti-crisis investigations and measures has not seen significant increases during the crisis period. Moreover, it has been found that states have shown a certain amount of flexibility in construing application of certain international principles rather than relinquishing them.

It is thereby demonstrated that the international trade liberalization process continues without major disruptions by the financial crisis. This gives confidence to states and business environment with respect to predictability of international trade developments.

The paper has significant added value brought about by both literature processing and interpretation and the author's experience in international trade negotiations. The very election of the indicator pertaining to anti-dumping investigations and measures was based

on the fact that changing trade defence mechanisms into protectionist mechanisms often stands for prevailing immediate crisis resolution.

Keywords: financial crisis, anti-dumping investigations and measures, trade liberalization, state aid, preferential trade systems

Code JEL: F13, F15

I. Introduction

The topic of this paper is directly related to the financial crisis effects on international trade liberalization. It aims to identify the way anti-crisis measures affected international trade negotiations in view of trade liberalization, successful performance of preferential trade systems, as well as negotiation and implementation of regional integration agreements.

Trade liberalization has seen various approaches. In many instances it has been regarded as detrimental to economic development, protectionist theories attempting to maintain the need to increase borderline protection by various tariff, non-tariff or para-tariff measures resulting in reduced cooperation and isolation of protected economies. In these circumstances, international trade liberalization has been accepted as a solution to encourage economic development.

Right after the Second World War, international trade liberalization panned out and the General Agreement on Tariffs and Trade (GATT) was negotiated in order to serve as a general framework for the liberalization process.

At the time, the matter of creating the World Trade Organization was brought up for discussion as a third pillar of the world economy along with the International Monetary Fund and the International Bank for Reconstruction and Development. Failure to fully understand the liberalization process as well as the absence from negotiations of some important states did not enable creation of this organization. Participating countries did not forsake the idea of creating such an organization and eventually, it was established under the Marrakech Agreement signed upon the finalization of multilateral trade negotiations within Uruguay Round. On this occasion, multilateral agreements were also renegotiated and complemented which allow member states to intervene in parallel with the liberalization process, by trade defence measures, based on well established internationally agreed rules (agreements concerning anti-dumping measures, compensatory taxes, safeguard measures, and restrictive measures by reason of major imbalances in the balance of payments).

Hence, it ensues that the liberalization process cannot and should not be seen as being apt to exclude its regulation. These are two processes going ahead together and ensure beneficial effects for economic development. International trade liberalization deepened via the multilateral negotiation rounds amongst which Uruguay Round has been the most complex and important.

Another means of trade liberalization consists in the international application of customs preference systems apt to increase commercial competitiveness of products coming from developing countries in the world market. Thus, the General Preference System (GSP) was defined which provides facilities for developing countries in their relations with developed countries. Likewise, developing countries defined the General System of Trade Preferences (GSTP) and the Protocol of 16 (P-16) which should enable trade liberalization among these countries. Aware of the need to deepen the liberalization process, GATT contracting parties accepting defining in article XXIV of GATT the possibility to negotiate regional integration agreements and requirements they have to meet in order to be internationally recognized.

These agreements proliferated over the past decades, while contributing significantly in trade liberalization.

During the period when the financial crisis worsened, a number of protectionist theories emerged aimed at resorting to trade defence measures more frequently. There were other theories which maintained giving up during this period any trade defence measures that might adversely affect international trade. Practice has demonstrated that effects of the financial crisis cannot be stopped by measures which deviate from multilaterally negotiated rules.

II. Literature review

Albeit the crisis was active only three years ago, economics literature attached major importance to this phenomenon given its implications on world economy. In this context papers published under the aegis of OECD, IMF, World Bank and European Commission are relevant. Moreover, the way anti-dumping investigations and measures in international trade were or were not encouraged by the crisis occurrence is tackled in various papers and periodical reports published by WTO/GATT.

Once the crisis has settled into, its effects were analyzed by all international and regional organizations, and by each individual state, as well.

Thus, at international level the three organizations that form the world economy pillars approached the crisis from various perspectives, i.e.

- World Trade Organization (WTO) and UNCTAD focused their efforts on inventorying all anti-crisis measures adopted in the various countries and on assessing crisis impact on the international trade.

- International Monetary Fund (IMF) and World Bank were more interested in the effects of the financial crisis and measures which might be taken in the banking sector in order to straighten out the situation.

At regional level, several „actors” (EU, EFTA, MERCOSUR) were involved in adopting measures seen as required and timely in addressing the problems created by the crisis.

At the same time, states got greater freedom to act, within their competencies, for the adoption of measures which should support national economies. Due to such increased freedom, the risk inherently arised that states invoke the crisis so as to adopt measures that wouldn't have been allowed in normal circumstances due to their categorization as prohibited protectionist measures.

It becomes increasingly obvious that one cannot consider addressing the crisis if globalization and regionalization elements in the world economy are ignored. An individual solution cannot exist in the context of crisis extension at international level.

III. Research methodology

Research started from the assessment of the way the financial crisis affected the economic sector resulting in: direct investments reduction due to lower profit rates in the circumstances of higher credit costs, shrunk international market due to high commercial credit costs, reduced trade financing possibilities required to guarantee export credits and for measures apt to ensure promotion of exports; potential increased trade defence measures.

The reason of this approach is determined by the wish to find positive responses which, by the various anti-crisis measures, the states gave to the need to mitigate their impact on their economies.

The specific element of the research in this paper consists in assessing the profile of the number of anti-dumping investigations and measures notified by WTO/GATT member states. Thus, a period of 5 pre-crisis years (2003 – 2007) and 2 years of active crisis (2008 – 2009) have been considered. In the absence of final data for the full year 2010, first quarter data have been projected over the whole year so that a complete picture of the crisis effects on trade defence measures should exist.

The relevance of this assessment consists in the fact that it provides a clear picture of the way states acted in the crisis period and of whether they turned anti-dumping measures from the trade defence category into excessive protection ones.

IV. Research results

Based on the two research aspects described in the previous chapter, key results are given below. Hence, in the context of anti-crisis measures the European Union has not deviated from international principles, acting in such a manner that:

a) funds allocated by states for banks and companies should be treated as state aid whom the applicable rules in this area should be applied. However, flexibility is accepted in applying such rules (reduction of state aid authorization period from 90 days to 24 hours; time limited state aids granted by reason of economic crisis, correct sizing of state aids and their periodical monitoring followed by stoppage when crisis factors are no longer active; granted state aids should not deviate from community principles and should be associated with restructuring and viability processes, as well as technology modernization programs).

b) export subsidizing measures should not represent deviations from principles set out within WTO;

c) import surtax introduction or higher customs duties should be linked with WTO accepted circumstances.

It can easily be noticed that these measures do not stand for a deviation from international rules and do not encourage primary protectionism by plain administrative interventions in the economy.

Furthermore, the World Trade Organization sent out several messages concerning anti-crisis measures, such as:

a) the need to inventory all commercial character measures adopted by contracting parties and candidate states;

b) substantiation of anti-crisis measures in consideration of mechanisms and legal instruments agreed multilaterally;

c) avoid that adopted anti-crisis measures should represent more or less disguised forms of increasing protectionism.

These messages are based on the fact that trade liberalization is not the root of problems created by the current crisis but rather a solution for them.

Data processed by the author with respect to anti-dumping investigations and measures revealed the followings:

A. Anti-dumping investigations opened by GATT Contracting Parties:

a) The average annual number of anti-dumping investigations in 2003-2009 is in the range of over 200 cases. Although data are available only for 2010 first quarter, by way of projections one can assume that there will be no significant deviations for this year either. Thence, it has been found that no major changes existed at the level of investigations during the active crisis years against pre-crisis years;

b) Main countries which opened most anti-dumping investigations during the active crisis period were: India (86), Argentina (47), USA (36), EU (34), China (31), Turkey and Pakistan (29);

c) Among countries undergoing anti-dumping investigations in 2008 and 2009 the followings stand out: China (153), USA (22), Thailand (21), Brazil (14) and EU (10);

Sectors undergoing anti-dumping investigations during 2008-2009 were: metals and metal articles (110); petrochemicals (81); textiles and textile articles (59); resins, plastics and rubber materials (52); electrical machinery and equipment (37)

B. With respect to actually adopted anti-dumping measures:

a) The average annual number of adopted measures during 2004-2009 ranges between 138-159 cases.

b) By projecting data available for 6 months in 2010 the number of adopted measures will not be significantly different for 2010;

c) Main countries which adopted anti-dumping measures during 2008-2009 were: India (61), USA (38), Brazil (27), EU (24), Argentina (21), Turkey (20);

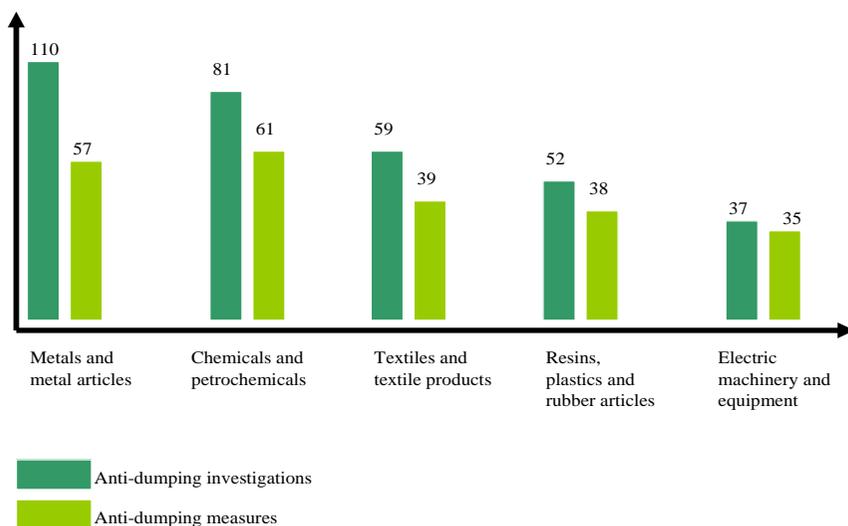
d) Among countries undergoing anti-dumping measures during 2009-2009 are: China (108), South Korea (15), Thailand (14), Indonesia (13), USA (12) and India (10);

e) Key product groups covered by anti-dumping measures during 2008-2009 were: Chemicals and petrochemicals (61), metals and metal articles (57), textiles and textile products (39), resins, plastics and rubber articles (38), electric machinery and equipment (35).

It is most obvious that during the crisis period we do not see any upsurge in anti-dumping investigations and adopted measures. It was therefore preferred to continue trade liberalization and avoid primary protectionism involving relinquishment of rules required for the normal development of the liberalization process.

Below is a diagram of the key groups of goods undergoing anti-dumping investigations and measures adopted during 2008-2009:

Diagram 1. Profile of anti-dumping investigations and measures by groups of products (2008-2009)



Source: WTO data processed by the author

From the diagram above it results that key sectors exposed to both anti-dumping investigations and measures are the same, while the crisis did not have any role in stimulating such measures in other areas than the ones considered as sensitive.

V. Conclusions

Since international trade was no root of the financial crisis but rather a solution to mitigate its impact on world economy, this paper highlights the following factual aspects:

- trade liberalization in observance of requirements set out in GATT/WTO has not been essentially affected by the crisis. Thus, Uruguay Round resulted objectives have not been jeopardized or abandoned, customs preference systems have not undergone changes and neither have they been relinquished, while internationally negotiated regional integration agreements continued to exist and operate in normal conditions;
- the international financial crisis has not determined the European Union and the other Contracting Parties to give up their own rules in the matter of state aid but rather a more flexible attitude was noted which resulted in reduced authorization aid request examination periods which were sufficiently important during this period, particularly to the benefit of the banking system. Moreover, objectives and aid granting requirements have not seen any changes determined by the crisis;
- multilaterally set out rules in the matter of anti-dumping investigations and measures continued to be enforced without easier access of the same, nor turning them into protectionist measures. We do not see any massive increase of cases where it would have been resorted to such investigations nor any dramatic changes concerning affected economic sectors by anti-dumping investigations and measures. It is evident that Contracting Parties took WTO messages into consideration to the effect that in adopting crisis effects containment measures those measures that do not deviate from multilaterally agreed principles and rules should be selected. It is also evident that it has been preferred to continue international trade liberalization and by no means use plain administrative interventions in the economy and excessive primary protection of the same.
- the crisis has not significantly affected products considered as sensitive from the perspective of anti-dumping investigations and measures.

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PREDICTABLE TRENDS OF EU TARIFF POLICY IN GLOBALIZATION'S CONTEXT

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This paper consists of information regarding current situation of international trade relations, in particular those pertaining to EU, concerning to preferential trade agreements, the trend towards globalization and custom policies. The importance of this document is given by the identification of strategy trends in respect to EU tariff policy in the context of changes at commercial exchange level, as a consequence of international trade globalization's trend. The tariff policy, as a component of the trade one, represents a factor which influences companies' behavior and, consequently the structure of import-export interstates relations. Specialty literature has lately identified a less natural phenomenon: starting with adoption by WTO states members of some measures and principles that emphasize the trade globalization tendency, a significant number of preferential agreements were settled in the meanwhile, many of them being bilateral, fact at least at first view is opposite to globalization phenomenon. The causes of this phenomenon have not been yet completely identified by economic analysts, so that these preferential trade agreements can be translated as a an impediment in the way of globalization and, on the contrary an intermediate phase and an accelerator of global extension trade exchange phenomenon. The present work ideas are based on analysis by bibliographic guide that link to historical GATT/WTO and principles which sustain its operation and to dynamic of international trade. Also, there have been studied data related to strategies of trade policy adopted by EU. The results consist of information about tariff policy elements adopted or forecasted by EU in general strategic context of participation to international trade. Particularly, it is emphasized the new competencies that must be achieved by custom personnel because of changes in trade exchanges. The main idea is represented by the necessity of custom authorities responsibility transfer toward new fields which do not represent traditional activities.

Keywords: *international trade, globalization, regionalization, tariff policies, trade policies.*

JEL Classification: *F13, F15*

I. Introduction

The last decades have emphasized, voluntarily or not, the increase of globalization process. If for phenomenon such as global warming there is identified an usual and unanimous reaction, concerning for instance trade globalization the opinions and actions are varied. One of the biggest international organizations, the trade one, in both its stages during the time (GATT or WTO) has been developing the globalization idea. At the same time, individual reactions of states were different. As a consequence, an explosion of preferential trade agreements has occurred in the last 20 years. Besides, an increase of bilateral agreements has been noted. This situation automatically generates the next question: is it

about a resistance to economic globalization phenomenon or it is an intermediated, preparatory phase? The answer it is not simple and is beyond the scope of this paper. What we want is to skim the current state in the hope that our notes can contribute to find the answer to the question previously mentioned. For the beginning we will talk about WTO evolution in order to identify its policy trend. After we shall analyze the last years of EU trade policy trend in order to identify its position to trade globalization, and finally we will try to forecast its tariff policy trend in the mentioned context.

2. GATT- WTO- Short History

Since its establishment in 1947, GATT has expressed partners' desire to reach the free trade state. This idea is emphasized by the decrease of duty tax in each round (see table 1). In the meanwhile, these decreases facilitate the geographic expansion of commercial relations; in other words the door towards globalization is open. One of the major factors which encourage trade globalization phenomenon is expenses decrease, which allows goods to have competitive prices around the world (close to production cost); duty tax decrease is part of this process, as well.

Table 1. GATT/WTO rounds

Year	Place	Subject covered	Countries	Average tariff reduction for industrial goods (per cent)
1947	Geneva	Tariffs	23	19
1949	Annecy	Tariffs	13	2
1951	Torquay	Tariffs	38	3
1956	Geneva	Tariffs	26	2
1960-1961	Geneva (Dillon Round)	Tariffs	26	7
1964-1967	Geneva (Kennedy Round)	Tariffs and anti-dumping measures	62	35
1973-1979	Geneva (Tokyo Round)	Tariffs, non-tariff measures, "framework" agreements	102	34
1986-1994	Geneva (Uruguay Round)	Tariffs, non-tariff measures, rules services, intellectual property, dispute settlement, textiles, agriculture, creation of WTO, etc	123	40
2001-20??	Runda Doha	Tariffs, non-tariff measures, rules, services agriculture, DS, trade and environment (certain aspects)	150	?

Source: Proksch, M. (2007)

The year 1994, when the Uruguay Round negotiations were concluded establishes the formal framework of WTO foundation. So, in 1995 was born one of the biggest international institutions. A short review of principles which sustain WTO's operation will allow us to demonstrate that one of the main objectives is international trade globalization.

Some of the principles that govern WTO are (Proksch 2007: 7-13):

- a) Universality- WTO rules are applicable to all members.
- b) Opening- there is no restrictions regarding the access within organization.
- c) Regulations- WTO establishes international trade development rules.
- d) Nondiscrimination- is the main principle of the WTO and is implemented by two means: most favored nation clause and the national treatment.
- e) Liberalization- WTO sustains the idea of duty tax reduction and the exclusion of quantitative limitations
- f) Predictability- once determined, duty tax cannot be increased anymore.
- g) Transparency- is a principle that increases WTO's credibility.

Obviously the principles mentioned do not offer but an overall image of WTO operations. However, this image is enough to emphasize the idea previously expressed: explicit or implicit WTO sustains trade globalization. Universality, opening, nondiscrimination, liberalization, and transparency are principles that support directly the globalization, while regulation and predictability indirectly support the global trade.

Nevertheless, the last two decades data highlight a strange aspect: an explosion of regional trade agreements and more an explosion of bilateral ones. This fact is more disputed as these agreements are generally against the rules established by GATT; exceptions are bi or multilateral agreements, which settle zero duty taxes and consequently support trade liberalization.

III. EU and WTO

EU has extended its intern efforts internationally, where it is recognized as an active supporter of GATT/WTO negotiation rounds. This multilateral framework has allowed EU to prepare the way to reach ambitious goals; high practical importance has the perspective of trade liberalization, reconnection to business environment trust at one critical moment in world economy development, and refreshment of multilateral commercial system, as well.

All these EU actions are part of the WTO states member effort to advance the way of trade exchange liberalization. However, as we mentioned, the last period was marked by an important increase in preferential trade agreements (as seen in the following graphics).

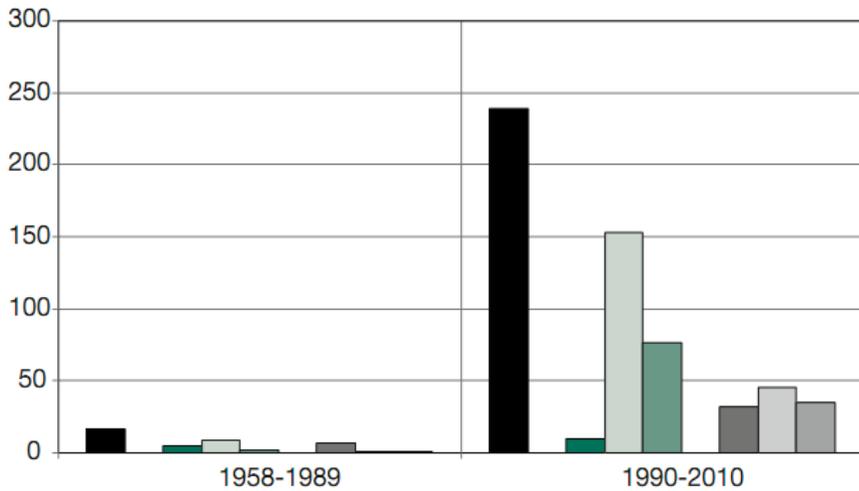


Figure 1. Preferential Trade Agreements 1958-2010

■ - Total, ■ - Customs Union, ■ - Free Trade Area, ■ - Services integration
 ■ - EU, ■ - North America, ■ - Asia - Pacific

Source: Koopmann, G. și Wilhelm, M. (2010)

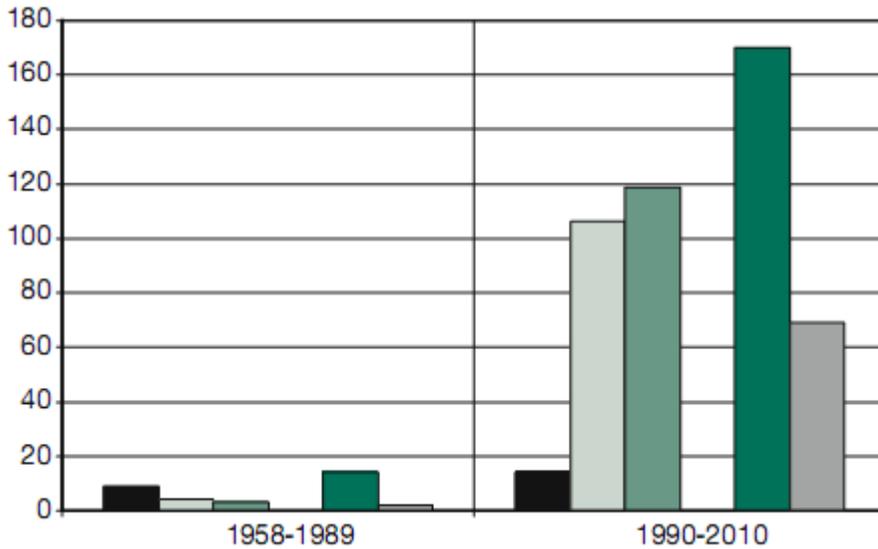


Figure 2. Preferential Trade Agreements by Geography

■ - North-North, ■ - North-South, ■ - South-South
 ■ - Regional, ■ - Cross-regional

Source: Koopmann, G. și Wilhelm, M. (2010)

A first glance over the two graphics leads us to the conclusion that most of the preferential trade agreements are regional that create free trade zone. This fact sustains the idea that many states support trade liberalization, but in the meantime, it considers that there are states which cannot face the competition generated by a trade completely free. In our opinion there is a struggle for “pole position” in the perspective of continuous deregulations

of commercial exchanges. As more states tend to reach developed state status, the area of free trade zone expands. These areas along with custom unions eliminate inside the protection tariff measures and create a competitive system based on competitiveness. In the perspective of generalization of such system, the position in trade exchange standing can influence the economy of a state.

That's why the trade and tariff policies of each state or interstate structure represent in this phase, a very important element.

VI. EU tariff policy forecasts

EU has built a mechanism of trade policy well articulated whose main features are:

- member states have agreed on transfer responsibilities in respect to duty tax assessment and trade policy management at EU level and to Community decisions' enforcement;
- member states continue to pay a major role in situations regarding economic and social difficulties caused directly by the trade nature;
- trade liberalization for industrial goods run continuously, as can be seen from preferential agreement for products and geographic areas;

This policy stipulates both offensive and defensive instruments. EU has 3 instruments to protect commercial interest of European manufacturers: anti-dumping, anti-subsidy and safeguarding measures. These instruments can be used by compliance with strict procedures established by EU Commission.

EU is one of the most important economic zones in the world and represents the most important actor in international trade with goods. EU economical success would not be possible without the existence of unique internal market, defined by four free movements: of goods, of persons, of services, and of capital.

Community Constitutional treaties do not define custom union, but they emphasize its main elements. In 2001 European Commission published The Strategy for Custom Union, which reiterates challenges the Community must face on a short term and proposes solid actions for Custom Union development and functioning.

The proposed strategy of Commission indicates five major fields of action:

- the simplification and rationalization of legislation,
- the improvement of custom's examination,
- provide better services to businessmen community
- the improvement of professional formation and
- the improvement of international cooperation in custom area

European Commission sustains practical implementation of the Strategy regarding Custom Union using the program "Custode 2013" (continuation of "Custode 2000" and "Custode 2007" programs initiated by Decision no. 210/97).

V. Conclusions

The continuing liberalization of international trade – fact that may conduct to the decrease, even to cancellation of duty taxes' role, WTO principles that do not accept non-tariff protections – only in justified cases, international trade trend toward globalization and new coming challenges in front of custom authorities (related to environment, health, terrorism) have imposed changes of tariff policy strategies.

In respect to EU there was identified the intention of developing complementary capacities of custom personnel to face these new challenges. The continuous simplification and

decrease of custom tariffs transfers the responsibilities of custom officers for environmental protection and citizens' health. Another activity area, which is relatively new, is related to intellectual protection. At the same time, the terrorist phenomenon does not have to be neglected – it represents an issue for custom authorities.

All aspects previously mentioned are, or should be, part of tariff policy strategy adopted by EU.

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THE RISKS OF A TOO QUICK EURO ADOPTION BY THE EU MEMBER STATES. THE CASE OF PORTUGAL

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In this article we present the risks faced by the new countries that have joined the European Union, and which also desire to adopt the euro currency as quickly as possible. We will analyze the existing literature regarding the ways these risks manifest themselves, depending on the economic conditions present in these countries. The risks are mostly caused by an incomplete fulfillment of the optimum currency area conditions, especially the ones regarding the synchronization of the business cycles, the existence of mitigation mechanisms in the case of asymmetric shocks, and to a lesser extent, the insufficient flexibility of the European labor markets. In addition, because there are different economic conditions between the countries that plan on introducing the euro currency and the ones that already had, mostly related to a lower economic development and lower prices, there are specific risks that affect the former countries. Moreover, the benefits of entering the EMU – greater monetary stability, reduced transaction costs, lower exchange rate volatility and a decrease of the interest rates – can in some specific cases become also costs. In order to quantify all these elements, we have constructed a case study of Portugal, which has entered the EMU in the first wave. We have determined that Portugal's experience after the euro introduction was a negative one, when compared with the previous period, because the convergence process did not actually happened, as expected. Not only that, but the economic differences between Portugal and the other EMU countries deepened, and the country's fiscal situation also deteriorated badly in all these years, up to the point where Portugal was forced to ask for external help. The case of Portugal is very important for the countries that are eager to adopt the common currency without first achieving a sustainable economic development, through increasing labor productivity and exports. It shows that fulfilling the nominal criteria and entering EMU must not be a declared goal, but just the last measure implemented after reducing the economic disparities and reaching a balanced economic development. Based on the existing realities from the Central and Eastern European states, different scenarios can be constructed that will take into account the way these risks influence the future economic environment, should these states were to decide accelerating the common currency adoption process.

Keywords: euro, risk, Portugal, adoption, EMU

JEL Classification: E52, E63, E65

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1. Introduction

There are undeniable benefits of adopting the common currency, and the most important of these are a greater monetary stability, reduced transaction costs, decreased exchange rate volatility and lower interest rates. Still, it must be mentioned that these benefits are effective only if the Economic and Monetary Union functions as it was intended to, without major economic turmoil – a detail that a few years ago was not even mentioned, but which recently has surfaced. Moreover, these benefits are not unidirectional, but have a hidden side, in some specific cases being able to become substantial costs.

Adopting the euro by a newly European Union member state would generate a climate of monetary stability. The experience demonstrated that the less developed European countries are exposed to a higher risk posed by massive external capital flows, or even speculative attacks against their own currency, perceived as being more vulnerable. Because the market expects that the economic development will accelerate following the start of the euro currency adoption process, or because of the existing investment opportunities in these countries, investment capital searching bigger returns will enter, quickly affecting the exchange rate. The massive capital inflows can also unexpectedly exit, if the economic growth is not on target, if the fiscal situation is not stable or if it finds better investment/speculative opportunities in other countries (Janackova and Borek 2004). Being part of a much more solid monetary structure built around the common currency would eliminate an important part of the monetary instability risk. Still, we must mention that this benefit is valid only when the euro currency is not affected internationally by global events that could erode its own stability.

Reducing the transaction costs is another benefit of adopting the euro currency. This benefit is especially visible in the trading sector among the Economic and Monetary Union member states, which use the same currency in their transactions. These countries experienced a fast increase of their trade after the launch of the EMU (Barr 2003). This advantage takes place just in the case of open economies, which are capable of exporting on the European market competitive products, in great quantities.

A third important benefit of adopting the common currency would be the decrease of the exchange rate. This would in turn eliminate the inherent higher exchange rate fluctuations experienced in relation with the country's external partners. Lowering the exchange rate volatility implies the reduction of costs incurred for protecting against these undesirable events. Moreover, if the volatility of the exchange rate diminishes, the risks experienced by the foreign investment projects are also lower, which in turn stimulate a more active investment environment, with immediate effects on the economic growth and the convergence process. Unfortunately giving up the ability to use this monetary intervention instrument has also negative consequences, because when economic imbalances appear, the adjustment costs can be higher by using other methods.

A last major benefit of adopting the euro currency is the rapid reduction of the interest rates, with positive consequences upon the economy. This interest rates reduction is mainly determined by a lower monetary risk, an element that is always incorporated in the interest's nominal rate. A quick lowering of the interest rates can have negative consequences also, when it is accompanied by a relaxation of the credit standards, which determined in the new euro zone member states an increase in consumption and a decrease in savings, having as a final result an unsustainable increase in the households' level of debt (Fagan and Gaspar 2007).

2. The risks of a too quick adoption of the euro currency by the new EU member states

A too quick adoption of the euro currency by the new EU member states has major risks, especially if the economies of these states are not well developed. There are risks that derive from the theory of the optimum currency areas, as well as specific risks caused by an insufficient economic development or induced by the economic convergence process. Often the costs generated by these risks are very high, being sometimes able to surpass the advantages of adopting the common currency.

One of the basic conditions stipulated by the theory of optimum currency areas for a smooth functioning of a monetary union is the synchronization of the business cycles. Unfortunately even the countries that already take part in the Economic and Monetary Union do not meet this condition. There is a core in the euro zone that acts as a single economic entity, but there are also countries whose economies are far from being synchronized with this core. For example, the member countries that in the '70 had high levels of GDP/capita – Germany, France, Belgium, the Netherlands and Luxembourg – also exhibited highly synchronized business cycles, and entering the Economic and Monetary Union did not influence them in any significant way (Giannone, Lenza and Reichlin 2009). On the other hand, the states that in the '70 had relatively lower levels of GDP/capita – Spain, Italy, Portugal, Ireland, Greece – their business cycles were not correlated with the business cycles of the countries from the first category, and moreover, even after the introduction of the euro currency, this variability persisted, together with the increased volatility of their business cycles. Even more, before their accession in the European Union, the business cycles of the East European member states were not synchronized with the business cycles of the big euro zone countries, not synchronized with the business cycles of the countries situated at the periphery of the euro zone (Greece, Portugal, Ireland) and not even synchronized among themselves (Süppel 2003). It is very important that the harmonization takes place between the business cycles belonging to the euro zone countries and those of the acceding EMU countries, otherwise the common monetary policy of the Central European Bank would induce long term unbalances in the economies that do not fluctuate in the same manner.

Another aspect mentioned by the theory of the optimum currency areas is the existence of mitigation mechanisms for the asymmetric shocks, which affect just a country or a small group of countries. Because the common monetary policy can not solve specific problems that appear in a certain state, it is imperative that there exists price and wage flexibility, backed by a high labor and capital mobility, in order to successfully respond to these type of shocks. In the European Union the labor market rules used to be quite rigid (Silva 2004), containing many barriers for the quick wage adjustment, and on top of that, for the newly entered member states, there are restrictive regulations regarding their labor mobility internationally. Moreover, it has been determined that the countries that joined the European Union in 2004 are more influenced by asymmetric shocks (Ramos 2004), compared with the rest of the countries that are already in the euro zone.

Besides these general risks that derive from the theory of optimum currency areas, there are specific risks that result from a lower level of economic development and lower prices, which exist in the new member states that in the future will also enter the euro zone. Entering the Economic and Monetary Union and having their products compete with the ones produced in the euro zone would cause a rapid increase in prices, if the production

technology increases also. If the labor productivity increases at the same speed as the increase in prices, the conditions of a durable convergence are met, without experiencing major disturbances along the way. This is the successful way of increasing the real convergence that happened in the vast majority of the states that introduced the euro currency: a rapid increase of labor productivity and a remarkable export performance (Kolasa 2010). Still, this process is likely to be a long one, which will continue way after the introduction of the common currency in these countries. Therefore, reducing the economic disparities will probably determine a higher level of inflation in these particular states, which will likely persist for a long time. If this will influence the level of the harmonized index of consumer price (HICP) from the euro zone, a too strict monetary policy implemented by the European Central Bank would slow this process of reducing the economic disparities, with negative consequences upon the states that started the economic convergence process. Therefore, a too quick adoption of the euro currency can be sub optimal for the less developed states that have entered the European Union (Rostowski 2003), because the European Central Bank will never target the acceleration of economic convergence among euro countries, but a strict inflationary level of under 2%.

3. The case of Portugal

At the beginning of the '80, Portugal had a precarious economic condition, caused mainly by the 1975 revolution, the losing of its colonies and the second oil shock. The budgetary deficits often surpassed 12%, and the current account deficits 10%. This was an unsustainable situation, and indeed, between 1980 and 1987 the Portuguese escudo depreciated by 60%, wiping the current account deficit (Blanchard and Giavazzi 2002). After this stabilization took place, Portugal embarked on an accelerated process of economic development, which saw its GDP grow at a yearly average of 5.1% during 1985-91. During 1992-95 this growth slowed at an average of 1.5% yearly, but then again Portugal gained traction during 1996-2001, with an average yearly GDP growth of 3.5%. The average yearly inflation dropped from 14% during 1985-91 to 7% during 1992-95, stabilizing to 3.5% between 1996-2001. The labor market also improved, the unemployment decreasing from 7% in 1995-96 to 4% in 2000-2001.

After the start of the euro adoption process and the move towards the fulfillment of the Maastricht criteria, Portugal experienced a substantial reduction of its interest rates. This was caused by the previous economic performance and by the market perception that the euro adoption process will be a successful one. This nominal – as well as real – interest rate reduction, coupled with the liberalization of the financial sector and increased competition, determined an increase in the volume of loans, especially household loans, which in the end translated into an increase of internal demand. The process of credit acceleration peaked just before the euro introduction, when the annual increase in the volume of loans was 28.6% in real terms, and the short term (3 months) real interest rate was 0% (Brzoza-Brzezina 2005). Coupled with the wage increases, particularly in the public sector, all fueled the illusory expectations that the incomes will keep rising indefinitely in the future.

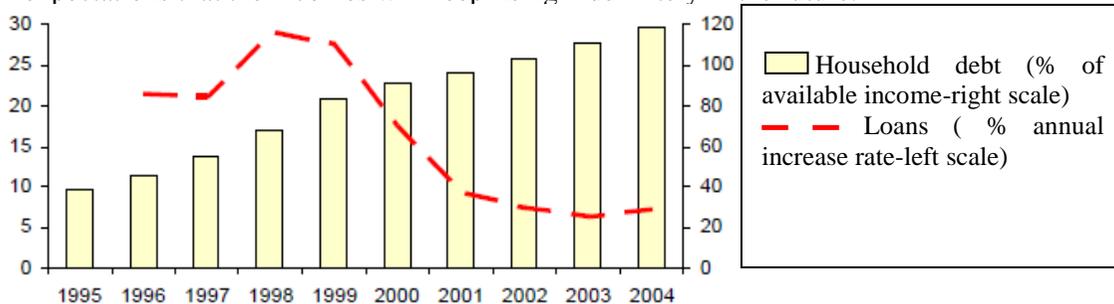


Figure 1. The increase of household loans and debt

Source: European Commission

Before entering the Economic and Monetary Union, Portugal managed to considerably reduce the budgetary deficit, from 7.7% of GDP in 1993 to 2.7% of GDP in 1999 (Abreu 2006). This was not based on a stricter fiscal policy – which in that period was expansionistic – but rather on a powerful economic development and low interest rates, which in turn determined lower costs for interest rate payments incurred by the Portuguese state. Unfortunately the structural reforms implemented towards increasing internal production were insufficient. However, with the national debt not surpassing the 60% limit, Portugal managed to successfully meet all the other nominal convergence criteria.

After entering the Economic and Monetary Union, it was discovered that some sectors, especially the textile and footwear industries, which held important shares in the Portuguese economy, were not prepared for the increased competition environment that followed. As a result they lost important market share, the export for these categories of merchandises falling from 2/3 of total exports in 1995-96 to 1/3 in 2004-2005 (Abreu 2006). Thus the Portuguese economy was forced to reorient to the constructions and services sectors, which in 2002 were already representing 76.7% of the total value added in the whole economy. Consequently the rising internal demand shifted towards foreign goods, the value of imports in this segments rising rapidly. In the end the current account deficit increased again, surpassing the 10% of GDP in 2000 and remaining at a high level ever since.

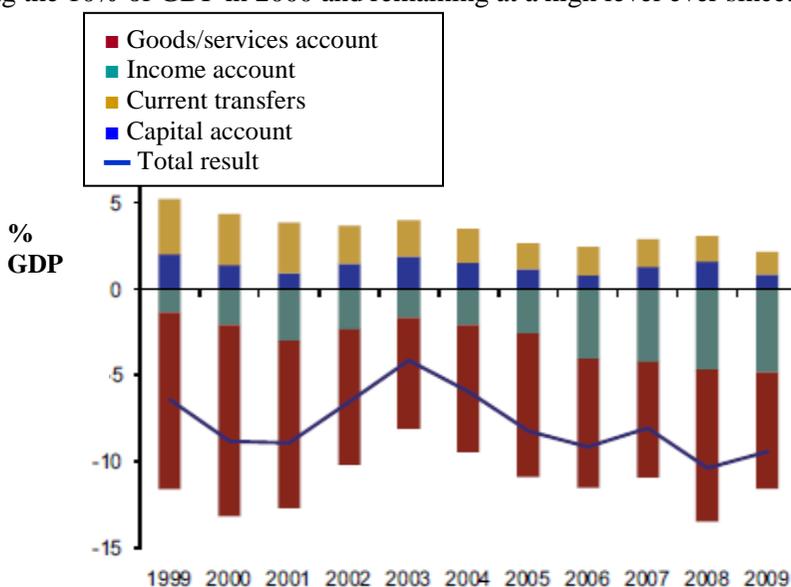


Figure 2. Portugal's current and capital accounts, 1999-2009

Source: Portugal National Bank

In the following years after Portugal entered the Economic and Monetary Union, the speed of economic growth decreased. Moreover, due to insufficient structural reforms, the country kept losing market share, while the salaries were increasing at a faster rate than the ones from the euro zone, mostly because the unemployment was low and there was a high pressure for constant wage growing. The process of credit expansion continued, coupled with the rapid decrease of the saving rates, which resulted in an increase of the debt burden of the households, which in 2004 reached 118% of disposable income, a level surpassed in the euro zone only in the Netherlands (Cardoso 2005). It was becoming more and more clear that the high consumption levels could not be sustained by the available incomes, especially in an environment of slower productivity gains and diminished market share. At the macroeconomic level the situation became dire in time, the main fiscal indicators experiencing deterioration, mostly determined by the higher sums that had to be allocated to finance the constant current account deficits.

Table 1. The evolution of Portugal's main financial indicators (percent of GDP)

	2005	2006	2007	2008	2009
Budgetary deficit	6,1	3,9	2,6	2,8	9,4
Public debt	63,6	64,7	63,6	66,3	76,8

Source: Portugal National Bank

4. Conclusions

Portugal's experience after entering the Economic and Monetary Union is not a positive one. The expected economic convergence never took place, the post adoption low growth rates deepening the existing economic disparities with the euro zone, which in 2009 were calculated to be 4% bigger than the level experienced before the euro adoption, in 1998. At the end of 2010 the economy of Portugal was in a dire condition, having a high level of public and private debt, a significant commercial deficit, and a small GDP growth rate, of 1.4%, after a drop of 2.5% in 2009 (Banco de Portugal 2010). These weaknesses were observed before the economic crisis, but after the onsets of its effects, they become more evident, and the ensuing austerity measures could not reverse this trend. The interest rates of the Portuguese bonds increased dramatically, fueled by the successive downgrades operated by the rating agencies. In April 2011 Portugal, after Greece and Ireland, asked for external help in order to be able to honor its financial obligations and thus to avoid the restructuring of its debt.

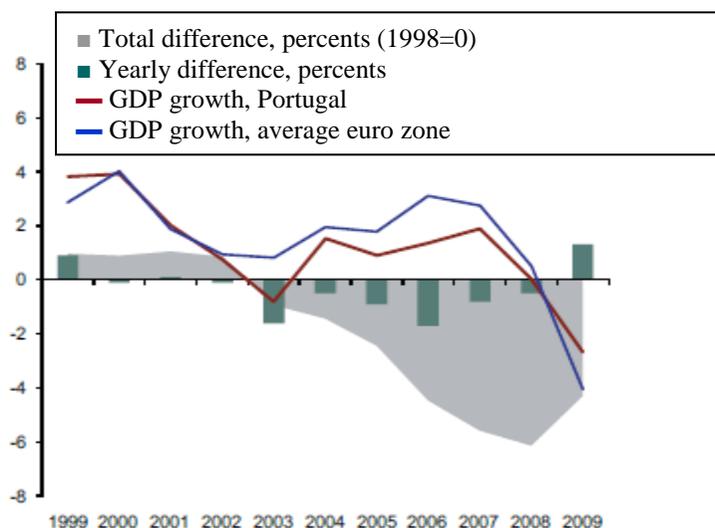


Figure 3. Economic growth difference, Portugal versus euro zone average, percents
Source: Portugal National Bank

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THE SOVEREIGN DEBT CHALLENGE: AN OVERVIEW

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Recent years have seen profound changes in country risk and its components, in the context of crises multiplication and diversification; the sovereign risk, a main country risk component, has undergone important changes, mainly given by mutations in its determining factors; the economy of "indebtedness" represents a reality of the recent years.

In this context, our paper aims to capture new issues related to sovereign risk and its manifestations, and to bring to the fore a number of relevant indicators concerning the indebtedness problems. Currently, the increasing sovereign obligations, the Greece 2010 episode and the real sovereign debt crisis testify the important implications that the national economic policy decisions have on entire nations. In general, the countries with servicing difficulties present a total external or public debt that overcomes the average of the emerging states; however, we can not accurately identify a threshold beyond which we can say that a state is overly indebted. Therefore, questions such as “Starting from what point is a state overly indebted?” or “What is the cause of the excessive debts of a state?” are fully justified and the answer or answers deserve being sought.

Studies on the relationship between various economic variables and the countries ability to deal with external debt problems are present in the country risk literature since the 1970s; beginning with authors such as Frank and Cline (1971), which gave priority to external debt service indicators such as Exports, Imports / GDP, Imports / Reserves, and continuing with other specialists, among whom we mention Saini and Bates (1978), Abassi and Tafler (1982), Haque, Brewer and Rivoli (1990), North (2001) Bouchet (2003), Meunier (2005), Longueville (2010) and many others, many ratios and indicators were carefully analyzed.

In our short study, we also present a number of recent aspects concerning sovereign risk, and we analyze some relevant indicators, using statistical data, for four countries: Romania, Greece, Hungary and Bulgaria. We underline the fact that, even if sovereign risk indicators are in the good intervals, the crisis risk remains present, especially because of the liquidity issues. For us, this brief paper opens the way for a much broader study, which aims to develop a model of sovereign risk analysis, the dependent variable, the probability of default, being explained by the evolution of the selected relevant indicators.

Keywords: sovereign risk, external debt, sovereign crisis, external debt indicators, thresholds.

JEL Classifications: F3 (F31, F34).

I. Sovereign risk as a component of Country risk

The study of country risk has become increasingly important towards the end of the 20th century, prompting interest from both the academic and the professional sphere (banks, multinational companies, insurance companies, etc.), financial markets also becoming more sensitive to the information on country risk. Of course, this increase in importance is not accidental, as it could be attributed to the multiplication of risks, their increasingly frequent and intense occurrence, but also to the mutations of the political and economic international environment. In a general manner, we can define country risk as *a compound risk, representing all elements emanating from a state's environment and which are able to affect a banking institution, an industrial or financial investor, an exporter and generally any foreign trader performing an operation in that country – political, commercial, financial and specific natural risks.*

Country risk is often seen as *a tool used to assist the decision making process* (Meunier 2005: 16); the results of the studies related to this type of risk should be immediately usable by bankers, investors or exporters; from this perspective, it is situated at the confluence of the business world and the economic science. Sovereign and transfer risks are two classic forms of risk manifestation for an agent (bank, investor) who is conducting economic and financial operations in a foreign country. About the sovereign risk, identified as the “probability of default on sovereign external debt” (Heffernan 1986: 7), we can state that:

- *it covers only the loans given to foreign governments (or guaranteed by them), loans that compound that country's foreign debt; it may affect both public and private legal subjects;*
- *this type of risk arises from the likelihood that at some point the government of the debtor country could not or would be unwilling to repay its external debt, the forms of manifestation being represented by the risk of rescheduling, of renegotiation or of repudiation of the foreign debt;*

- *there is a lack of legal approach; countries don't go bankrupt; despite waves of sovereign defaults and restructurings, the statement is still true at its core, the reason for this is to be found in the concept of sovereignty* (Andritzky 2006: 15).

In this brief study, we intend to capture new issues related to sovereign risk and its manifestations, and to bring to the fore a number of relevant indicators in relation to the indebtedness issues. The probability of crisis remains difficult to quantify, but the key challenge is, for both academics and managers, to create a system of early warning indicators that highlight the macro and microeconomic fragilities of the states with risk of default. Evolution of certain values will be presented in the case of Romania and other countries in the region, some remarks being made on this occasion.

II. Brief overview of some recent issues concerning the sovereign debt. The indebtedness of an economy

Recent years have seen profound changes in country risk and its components, in the context of crises multiplication and diversification; in turn, sovereign risk has undergone important changes, mainly given by mutations in its determining factors. A distinction can be made among countries with strong currencies (EUR, USD, GBP, etc.), on one hand, and states with weaker currencies, on the other hand:

Table 1 – Specificities of sovereign risk according to the concerned states

	Countries with strong currencies (developed ones)	States with weak currencies (generally developing countries)
Public debt/GDP	- the progressive increase in the share of public debt to GDP after 2008;	- maintaining a relatively constant level of public debt to GDP;
The dynamics of public debt/solvency crisis risk/default risk	<ul style="list-style-type: none"> - moderate risk/easy refinancing (even in the case of a high debt), strong currency, <i>real vaccine which immunizes states with default risk</i>; - positive feedback from the rating agencies; - the distinction between sovereign risk in foreign currency and sovereign risk in local currency disappears; - sovereign risk related to foreign currency debt, quasi -inexistent; - refinancing risk is lower and does not imply solvency risk; - besides the domestic financial market, central banks can provide the necessary funding; in the euro zone, government bonds are often purchased by commercial banks; in the U.S.A., Asian central banks currently buy treasury bills; - solvency depends directly on the central bank's monetary policy (interest rate guidelines, required reserves, mechanisms of action). 	<ul style="list-style-type: none"> - high risk, especially when public debt to GDP evolves (1-3 points per year), based on average values (40-60% of GDP); - average or negative assessments from rating agencies; - the distinction between debt in foreign currency and the one in local currency can be operated; - the analysis of debt sustainability is achieved through budgetary balances and current balances, external liquidity and vulnerability to exogenous shocks analysis; - the risk of default, solvency and liquidity are closely related; - the importance of the good faith, of the willingness to pay; - degradation of solvency hinders refinancing difficulties and, as a consequence, liquidity crises; - the assessment of sovereign risk is influenced by the indebtedness of the private sector.

Source: processed after Guy Longueville and Eric Vergnaud, 2010.

A country with a particular situation is Greece; until about two years ago, the Greek state was part of a group of countries characterized by the degradation of public sector solvency, in the absence of liquidity constraints. A year later, the rising of public debt to GDP has been dramatic, and the negative perceptions of solvency in the various markets has generated significant difficulties in financing and refinancing, boosted by speculative attacks. Solvency degradation can be attributed to the effects of the economic crisis on the budget balance, the lack of reliable measures for the purposes of recovery of public finances, the presence of some irregularities discovered late, in the context of a public accounting opacity of the Greek state (Longueville 2010: 11). Also, the evaluations provided by the rating agencies have contributed to the increase of the difficulties in refinancing, their procyclical effect being evident.

Among the factors that increase the country risk and its sovereign component, a state's indebtedness appears to us as having a particular importance. The situation recorded in South America in the mid 1980s, influencing the development and manifestation of the

modern country risk, showed the world that a sovereign state can reach a point where it is no longer able to pay a debt in a foreign currency.

In general, the countries with payment difficulties present a total external or public debt over the average of the emerging nations (Meunier 2005: 23); however, we can not accurately identify a threshold beyond which we can say that a state is overly indebted. Therefore, questions such as *Starting from what point is a state overly indebted?* or *What is the source of overly indebtedness of a state?* are fully justified and the answer or answers deserve being sought.

Whichever method is used in the study of country risk – rating systems, analytical techniques such as reports, econometric techniques, etc. – some indicators are irreplaceable (as inputs), holding a special relevance when it comes to the global risk assessment specific to an economy.

In the following table we present, without claim of completeness, few variables/indicators that have already become classics, whose observation is relevant in the context of analysing a state from the perspective of the country/sovereign risk:

Table 2 – Different indicators of the sovereign risk according literature

Variable or indicator	Characteristics and significance
GDP/capita, GNP/capita	<ul style="list-style-type: none"> - genuine indicators of the wealth of a state; - allow the classification of the states according to their wealth; a small value, for example, points to a poor state, with probable difficulties in meeting its obligations to the outside and, consequently, a high country risk.
External debt/capita	- quantify the level of indebtedness, but also the ability to contract new loans safely.
External Debt/GDP	- specific indicator of the indebtedness of a state.
Imports/GNP	- measures the relative size of imports and is an indicator of the degree in which the trend of the national income is affected by a potential decision to reduce import due to the difficulties in managing debt.
Growth rate of exports	- exports can be seen as the cheapest source of foreign currency, countries with favorable trend in exports comprising good solvency premises.
Interest paid/debt service	- measures the cost of debt and the repayment ability of a state.
Inflation rate	- the inflation rate is an indicator of economic performance, in close conjunction with the monetary policy. The inflationary phenomenon involves reducing the real value of a state's income and causes a depreciation of the currency, reducing a country's ability to repay its debt.
Foreign direct investment/capita, foreign direct investment/GNP	- most theorists consider that a significant concentration of foreign firms in one country may be positively correlated with the risk of expropriation, because governments could consider this fact as an obstacle to economic efficiency of a state, foreign companies appropriating on the other hand a too large fraction of the profits made.

Source: processed after Bouchet, Clark, Gros Lambert 2003, Hurson, Doumpos, Ricci-Xella, Zopounidis 2006, Meunier, Sollogoub 2005, Nagy 1984, and personal considerations.

Of course, we can bring to the fore many more variables and indicators that are important when we study an economy in terms of the emanated risk. But what we want to emphasize here is that the evolutions of the variables and those of the indicators are currently taking place very rapidly, which requires a continuous analysis of the dynamics. Studies on the relationship between various economic variables and the countries ability to deal with external debt problems are present in the literature since the 1970s; from authors such as Frank and Cline (1971), which gave priority to external debt service indicators such as Exports, Imports / GDP, Imports / Reserves, and continuing with other specialists, among whom we mention Saini and Bates (1978), Abassi and Tafler (1982), Haque, Brewer and

Rivoli (1990), North (2001) Bouchet (2003), Meunier (2005), Longueville (2010), were carefully analyzed the *variables that form the backbone of the economic and financial aspects of country risk analysis* (Bouchet, Clark, Gros Lambert 2003: 42).

Several elements are relevant when we propose an analysis of sovereign debt; first, *solvency and liquidity*, and, secondly, *external debt sustainability* (Meunier and Sollogoub 2005: 29). As regards solvency, the essence of the analysis consists in reporting the debt stock to the wealth of a state. Sustainability requires a more nuanced and dynamic analysis; in this context, the evolution of external debt relative to the evolution of global wealth is particularly important.

Liquidity refers to cash issues, relevant being the limit – the maximum level of debt – to which a state is able to repay; the elements to be compared are, of course, available liquidity and the amount refunded. When we try sizing the "safe" external debt, it seems useful to relate it to the state's assets, translated mainly by GDP. From the perspective of this reporting of external debt, to assets (GDP) or income (exports), the thresholds most often mentioned in the literature are 50% and 150%. The issue of the alert thresholds is extremely complex and, although they are widely used in the study of country risk, we believe that they do not offer a high degree of reliability. The diversity of the developing states, the extremely fast evolution of economic climate, the lack of a permanent correlation between the level of debt and the probability of entry in the default, require addressing risk from case to case.

III. Case study – a glimpse on the indicators of four countries

We will continue by presenting the evolution of some indicators and ratios that we consider relevant for sovereign risk analysis, for the following countries: Romania, Greece – the well-known example of sovereign debt problem, Bulgaria and Hungary.

		2001	2002	2003	2004	2005	2006	2007	2008	2009
Romania	GDP/Capita Th. USD	3,81	4,12	4,35	4,73	4,95	5,34	5,69	6,12	5,70
	GDP growth	5,7	5,1	5,2	8,4	4,2	7,9	6	9,4	-8,5
	Inflation r. %	34,45	22,48	15,37	11,85	8,99	6,59	4,83	4,84	5,58
	TED/GDP	0,23	0,20	0,25	0,28	0,31	0,37	0,40	0,52	0,69
	TED/Exports	0,94	1,04	1,09	1,09	1,19	1,48	1,61	1,65	2,34
	Ext. Db. Ser. Bil USD	2,56	3,18	3,56	4,71	6,91	8,64	11,56	18,03	16,33
	Tot. Reserves monhs of imports	2	4	4	5	5	6	6	5	8
FDI Bil US	1,15	1,14	1,84	6,44	6,48	11,39	9,92	13,88	6,31	
Greece	GDP/Capita Th. USD	12,93	13,35	14,11	14,70	15,01	15,75	16,39	16,52	16,15
	GDP growth	4,2	3,4	5,9	4,6	2,2	4,5	4,5	2	-2
	Inflation r.%	3,65	3,91	3,43	3,02	3,48	3,31	2,99	4,23	1,35
	TED/GDP			0,97	0,98	0,99	1,12	1,21	1,41	1,62
	TED/Exports			1,71	1,34	1,30	1,29	4,5	1,08	8,53
	Ext. Db. Ser.									
	TRMI	2	3	1	0	0	0	0	0	1
FDI Bil USD	1,58	0,63	1,33	2,10	0,65	5,4	1,95	5,30	2,41	
Bulgaria	GDP/Capita Th. USD	3,61	3,80	4,03	4,33	4,63	4,96	5,30	5,66	5,38
	GDP growth	4,2	4,7	5,5	6,7	6,4	6,5	6,4	6,2	-4,9
	Inflation r. %	7,36	5,80	2,34	6,14	6,04	7,41	7,57	11,95	2,47

	TED/GDP			0,53	0,61	0,71	0,82	0,95	1,03	1,07
	TED/Exports	1,55	1,51	1,33	1,19	1,34	1,03	1,31	1,31	1,74
	Ext. Db. Ser. Bil USD	1,37	1,39	1,11	2,34	3,96	2,73	4,19	5,37	5,21
	TRMI	5	6	6	6	5	5	5	5	4
	FDI Bil USD	0,81	0,90	2,09	2,66	4,31	7,75	13,21	9,92	7,02

Hungary	GDP/Capita Th. USD	1,36	1,41	1,48	1,55	1,50	1,66	1,68	1,69	1,58
	GDP growth	4,1	4,4	4,3	4,7	4,7	4	1	0,6	-6,3
	Inflation r. %	9,14	5,53	4,38	6,78	3,55	3,87	7,93	6,06	4,2
	TED/GDP	0,60	0,59	0,70	0,68	0,62	0,59	0,60	0,73	0,75
	TED/Exports			0,60	0,64	0,76	0,75	0,96	0,98	1,81
	Ext. Db. Ser.									
	TRMI	3	3	3	2	3	2	2	3	5
	FDI Bil USD	3,94	3,01	2,17	4,28	7,62	19,52	70,84	66,89	2,78

Table 3 – Sovereign risk ratios and indicators (Romania, Greece, Bulgaria, Hungary)
Source: World Bank, 2011

Analyzing the situation in terms of the established warning thresholds, a number of remarks can be made; in the case of the total external debt to GDP ratio, the evolution in Romania in the period 2001-2009 was an upward one, the critical threshold of 50% being exceeded in 2008 (52 %). In 2010, the indicator reaches 75%, and we can already speak of a over-indebtedness issue. Inflation rate, although rising, does not reach the benchmark value of 10.5%, overcome by countries in crisis such as Turkey in 2000, Indonesia in 2002 or Brazil in 2003. Meanwhile, total external debt to exports is growing significantly, exceeding the alert threshold of 150% in 2007. In the case of the sovereign debt crises of the 1990s (Argentina, Brazil, Ecuador, Uruguay, etc..) the level of this indicator reached values above 250%. Romania's liquidity reserves, in months of imports, however, kept a high level, the benchmark of three months being significantly exceeded. Moreover, it can be stated that these reserves could even be resized, creating positive effects in other areas.

For Greece, the issues related to the debts size are accompanied by an extremely low level of reserves, which entitles us to talk about liquidity risk. One of the specific problems of the Greek state, unlike other countries examined, is the impossibility of implementation of its own monetary policy.

Hungary, after some problems related to the external debt in the mid-1990s (total external debt to exports of 250% in 1994), managed to bring under control the evolution of its indicators (91% in 1997 and, during 2000, values under 200%); in the same time, inflation rate is relatively low.

A higher level of external debt to GDP stands for Bulgaria, but the reserves are high enough to dissipate the liquidity risk. Also, the inflation rate is well below the alert threshold.

Liquidity risk appears as an extremely important one, and this because a number of seizures recorded in the last period were stimulated by it, even without indebtedness; the crises without over-indebtedness (Mexico, 1994, Turkey, 2000, etc.) have multiplied, making predictions more and more difficult: *pure liquidity crises occur at total external debt to GDP ratios of less than 45%* (Manasse and Roubini 2005: 57).

IV. Short conclusion and further researches

The *economy of indebtedness* is a reality of the recent years. Over-liquidity facilitated credits, the selection of borrowers being more and more permissive. In this context, the country risk analyst is increasingly concerned about sovereign crisis and its consequences; he raises the natural question, appealing to economic history: *What are the states that have*

recently experienced a sovereign crisis? The answer will be surprising, inducing the idea of a reduced probability of default of the states. What the answer to that question hides is the fact that a significant number of states have avoided collapse thanks to the International Monetary Fund, or as a result of debt restructuring. Beyond liquidity risk, with the highest visibility, a number of other fragilities are particularly noteworthy: the current account deficit, the existence of an overvalued currency, the excessive government deficit, the high governmental debt, the difficult political situation, etc.

In Europe, many countries are facing problems due to high sovereign debt. Not only Greece, but also Spain, Portugal, Ireland or Italy represent well-known cases. Among the causes, we can mention the lack of controlling government deficits, the recession effects, the public accounting opacity, or the inability to use independent monetary policies.

In order to study the default probability for a given state, it is extremely important to take in consideration the economic fragility. A sovereign risk analysis is advised to include *a 360 degree review of the economy, including the banking system, political stability, monetary policy, and the current regime* (Andritzky 2006: 71). Finally, we add that, in addition to the specific vulnerabilities of an economy, we are also interested in the state's willingness to pay. Even today, not all countries are of *market-friendly* type, some continuing to compare the gains and the losses obtained for the fulfillment of international obligations, namely repudiation of foreign debt.

This short paper opens the way for a broader study that we will propose, and which aims to develop a model of sovereign risk analysis, the dependent variable, the probability of default, being explained by the evolution of the selected relevant indicators.

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SHORT REVIEW ON EUROPEAN TURISM IN 2010 THROUGH THE INFLUENCE OF THE FINANCIAL CRISIS

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The aim of the present research paper is to present a short review on the European tourism in 2010 through the influence of the financial crisis. The importance of the paper resides in the presentation of the impact that the economic downturn had on the European tourism, taking a closer look also in the investment in hotel industry in 2010. The paper's objectives took into consideration the current situation and by proposing the rural tourism as an alternative we offer a solution in order to minimise its effects on this specific activity sector. The subject has not been extensively debated in the specialized literature even though it represents a current issue both regarding the private business environment as well as the main national and international bodies that regulate the tourism industry. The research methodology consists in a SWOT analysis through which we prove the rural and ecotourism to be a viable solution in order to minimise the downturn of the industry for countries in CEE. The added value of the paper consists in the analysis of a subject that is too little taken into consideration and of big importance for the companies acting in this specific domain.

Key words: european tourism, financial crisis, rural tourism, ecotourism

JEL codes: L83, M16, R19, Q01

1.Introduction - International tourism in 2010 and the financial crisis

After a few years of healthy growth, the year 2009 represented a turning point for the european tourism, the hotel and leisure industry due to events such as government down-comes, the credits crisis and the increase in unemployment which lead the national economies into recession, leaving fewer money available for leisure trips and other forms of leisure.

Meantime, the corporations have implemented cost cutting measures including the amount of air travels for their employees and decreases up to elimination the group meetings in famous brand hotels and resorts. In spite of the turmoil registered in the period 2009-2010 the european tourism has recovered spectacularly, even if the effects of the financial crisis have still been felt through the shortening of the traveling time and the reducement of the allocated budget.

The decreasing of the revenues has led to the lowering of the tourist consumption by shifting the demand towards similar tourist destinations in terms of motivation but different regarding the price level. According to the European Travel Monitor the number of out bond trips made by Europeans rose by 1% in the period January-August of last year, while the

hotel occupancy degree has fallen by 2%, due to the lowering of the spendings by 3%. According to the same source's forecast 2011 will register a rise in the outbound tourism compared to the period mentioned above. The short-term travel to the European region have stagnated and the long term ones have risen by about 3%, this phenomenon being explained on the basis of one of the tourism demand determinants: the distance of travel.

The latest information on tourism development in 2010 shows that 2011 will be a fruitful one for the whole sector, but the trend, although increasing, in terms of value shows that the performances from 2008 will not be achieved just yet. The signals remain positive due to the massive growth of liquidity resulted from the closure of the last financial year. The existing liquidity will allow future investments. At the macroeconomic level the indicators show positive trends and the economies of emerging countries are becoming stronger. Taking into account the risk of indebtedness that still hangs on the economies of the EU (after the failure of Greece and Ireland, suspicions are hanging over Portugal and Spain), The European Travel Commission has predicted for 2012 an overnight increase in visitors by about 4% in the European Union.

2.Literature review

The subject has not been extensively debated by the specialized literature even though it represents a current issue both regarding the private business environment as well as the main national and international bodies that regulate the tourism industry.

We must take into consideration the effects of the economic crisis may have on short term (eg. changes in consumer behavior regarding tourism), but also, most important the long term changes. Therefore, "the macroeconomic environment as sketched by international financial and other institutions can be useful in providing the necessary background information to understand how tourism industries can react to these challenging times and to consequently perform short- and mid-term projections." (Papatheodorou, A., Rosselló, J. and Xiao, H. 2010: 41)

Even though the world economy has faced a series of economic crisis, however, the specialised literature has mostly analyzed the financial and monetary implications and has focused less on their influence on the tourist flows. After a short period of time following the break of the financial Asian crisis a series of specialised books and articles have appeared regarding this subject but the approach from the tourist point of view has been long expected (Pine, R., Chan, A. and Leung, P. 1998: 252-256.), (Leiper, N. and Hing, N. 1998: 245-251), (Prideaux, B. and Kim, SM. 1999: 523-532).

As a consequence, the causes and implications of the crisis for Asia as a whole and for individual countries have been widely discussed from an economic perspective but the impacts on tourism are relatively under-researched. The academist (Igor Mladenović 2009: 51-58) was a pioneer that addressed the impact of the current global economic crisis, driven by the real estate and banking crisis in the United States of America on tourism in the Balkan countries. We can also identify impact studies and reports on tourism conducted by authorized institutions of the European Commission (European Travel Commission 2010) or belonging to consulting firms such as Ernst & Young (2009) that have analyzed the trend of tourist flows in the period 2008-2011.

3. Financial crisis and the investments in hotel industry in 2010

The global financial crisis is bound to exert a major impact on the development for countries, affecting different international resource streams such as: private capital flows such as FDI, portfolio flows and international lendings, official flows such as: the financial development institutions, the financial development transfers, the capital transfers and current transfers such as: assistance and official development payments. For the European region, the crisis was most visible in January 2009 when retail sales, excluding cars and construction, have decreased by 3.5%. Tourism Economics, a company owned by Oxford Economics stated in their newspaper „The Financial Crisis and the implications on European tourism" for the European Transport Commission that the consumption is declining both in 2009 and in 2010 by 1.7% and respectively 0.1%”.

Almost all the European countries in the Euro zone have introduced tax incentives to support the domestic demand. The combined sizing of these sums amounted to about 1% of the gross domestic product. However it was unlikely that these measures would produce a major increase in domestic demand for goods and services before the end of the year and their effect was negligible. The tax incentives and the normal operation of automatic stabilisation caused a significant deterioration in the governmental fiscal balance so that in the Euro zone the fiscal deficit reached 4.3% of the gross domestic product in 2009 being projected to increase by 5% in 2010.

The responses of the tourism sector opposite to the financial crisis are the reactions of the government due to the existence of certain promotional campaigns as well as the response of the private sector to the performed actions. National tourism offices in all countries have suffered as the level of promotional funds decreased with the devaluation of local currencies.

Noting the earlier responses to the crisis offered by both the private and the public sectors as well as the individuals it is noticeable that the short-term strategic plans have assumed a higher level of importance than the long-term considerations. Individual consumer responses are the most visible and can be measured by the decline of tourist activity, both locally and internationally. The uncertainty about employment and worries about the ability to meet future financial obligations can be the primary reasons that explain the reduction in tourism activity. (Mladenovic 2009: 52).

Governments often exert a negative impact on tourism withdrawing funds during some austerity campaigns and giving in to the temptation to raise taxes. The analysis of the responses to the crisis offered by both the public and the private sectors indicates that there are some key strategies for maintaining tourism at a limited level. Firstly we have ensured the political stability. In fact, the past experience has shown us that governments have been installed through a peaceful transfer of power from previous administrations.

A second successful strategy is the reassessment of promotional priorities to increase tourism in countries that have not been affected by the crisis (Mladenovic 2009: 56). The success of this strategy was visible in the case of Australia, Korea and Thailand. Under this strategy there is the need for governments to maintain or increase expenditures. There is also a corresponding need for the private sector to increase the level of promotion both through collaboration in national campaigns as well as through individual actions with foreign distributors.

In conclusion, we can say that, in accordance with all these experiences, the European tourism industry is facing significant challenges. That is, with the reduction of capital

inflows in European countries due to the crisis in the countries of origin of capital, the exchange rate regimes have become more vulnerable.

The financial crisis has driven more than ever to the reduction of credits for projects of new hotels and 2009 has registred very few investment projects in this area. The refinancing strategies, which are usually available for real estate companies, have often been used for other purposes than for hotels - the property is in most cases difficult to reconvert or relocate while for most companies these factors are not tied to the company's success. The restructuring strategies have therefore been focused on optimizing the existing properties rather than on rescue plans in the area of major pipeline development. The remedies must be designed to stabilize the situation of long-term revenues for the owners.

It is likely that in future the low-budget and the 3-4 star accommodations be promoted, especially in areas where previously there were gaps such as in India as well as before large events like the Olympic Games in London and Sochi.

According to the report done by BNP Paribas Real Estate the investments in the hotel industry began to grow in 2010, they recorded a total volume of 6.6 billion euros in the five countries analyzed (France, Spain, Italy, Great Britain and Germany) an increase of approximately 110% compared to 2009 when they recorded a 3.1 billion euro volume.

The investment volume in tourism in the EU increased in 2010, but has not yet reached its peak from 2006 (20 billion euros) being marked by two major transactions: the acquisition of the group Norgani by the group Pandox and the single asset transaction of Grosvenor House. Grosvenor House in London was bought by Sahara India Pariwar, belonging to the Royal Bank of Scotland for a price of 550 million euros, about 1.1 million per room. Last year there were 80 transactions, totaling 589 hotels, 60,000 rooms.

Geographically speaking, Britain has remained the most active investor on the European hotel market with a total volume of 1.9 billion euros, followed by Scandinavia (1.2 billion euros), France (772 million euros), Spain (680 million euros) and Germany (200 million euros)".

4. Research methodology

Given the present situation of the industry we propose a SWOT analysis on the tourist market from CEE as research methodology in order to identify some niche tourist products and to propose them to the bidders in the private sector.

SWOT analysis

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> - the variety and diversity of the tourist resources, both natural and anthropogenic; - the geographical diversity: mountains, hills, plains and sea; -the diversity of the tourism potential: protected areas, national parks, caves, hunting and fishing, unpolluted areas, culture, etc. -increasing the interest in agro-tourism -the existence of cultural and historical relics in the region -the vast majority of countries in the Central and Eastern Europe as members of the EU develop 	<ul style="list-style-type: none"> - the lack of local infrastructure that hampers the access for tourists (poorly developed road infrastructure, airports that need massive investment in order to upgrade the technology, the obsolete rail infrastructure) -the inadequacy of the tourist offer to the consumer requirements, especially the poor quality of accommodation and restoration. -the lack of tourist information and promotional materials of the touristic offer; -the lack of qualified personnel in the tourism services;

regional plans for sustainable tourism development -good conservation of inherited traditions and customs	-the low information and promotion of tourism jobs available; -the cultural rigidity -the lack of local capital -the delays in private funding of tourism utilities -the existence of large accommodation units with poor architecture
OPPORTUNITES	THREATS
-the increase in the number of visitors in the region due to the free movement of persons -the need to conserve and protect nature through an organized tourism sector that respects sustainable development (eco-tourism) -Creating economic and social complementarities on the terms of industrial regress and agriculture stagnation; -Ecological reconstruction through tourism of habitats, affected by other forms of economic exploitation like mining or agriculture -accessing ERDF European funds in order to realise the regional specialization in tourism; -the involvement of the local population in the development of rural tourism by preserving the traditions and customs; -the possibility of exploiting the natural potential in order to achieve a kind of eco tourism. -the discovery of alternative sources of fuel and energy and their ability to capitalize them in the touristic sector -the emergence and development of private property as well as other mechanisms (eg concession) of ownership of movable assets -the entrance of the main integrated hotel chains on the market -the openness to new sources of financing of the touristic sector (credit, leasing)	- strong competition -the negative image of tourism generated by the communist period -the deterioration of tourist resources due to inadequate exploitation and development of other forms of competitive economic capitalization (industry, agriculture) -the reduced competitiveness of the inbound tourism offer compared with the outbond offer -the low regulatory legislation.

Given the SWOT analysis carried out above we propose two types of “niche “ tourism in order to overcome the financial crisis in the Central and Eastern Europe area : the rural tourism and the ecotourism.

Rural tourism is a "form of tourism that includes any tourist activity organized and led in rural areas by the local population, harnessing the local tourism resources (natural, cultural, historical, human) as well as the facilities, tourist establishments, including hostels and agro farms"(WTO). The specific features of rural tourism are: location in rural areas, touristic functional design of the construction, open space, contact with nature, tradition, organization and traditional practices, traditional character - gentle growth, organic as compared with the family, diversity and forms of presentation. According to (Page and Getz 1997: 3) rural tourism is much more than “countryside”. The impact of rural tourism is social and also cultural, not only economical. Butler and Clark, 1992 cited by (Page and

Getz 1997: 12) consider that the impact of rural tourism on development of the respective area is to be analyzed in relation to “income leakage, multipliers, labor issues, the limited number of entrepreneurs in rural areas, the proposition that tourism should be a supplement to rather than the mainstay of rural economies”.

In order to better understand the term of ecotourism one must first define the following concepts: responsible tourism, green tourism, geotourism. "The responsible tourism" is the fact that all those involved in tourism activity, tourists and service providers must adopt a responsible attitude towards tourist destination. "Green tourism" is often used as a non-academic version of sustainable tourism and "Geotourism" is the form of tourism that supports or enhances the geophysical characteristics of a space - the environment, culture, aesthetics, heritage and population welfare.

A tourism project or product must meet four criteria (to be held in the natural and cultural spaces, to encourage the involvement of local labor, to involve conservation measures and to support local welfare.) in order for it to be an authentic ecotourism product. Of course, we cannot say that tourist services which do not include all four components always have a low quality, just say that it is not an ecotourism activity. We propose to include these types of tourism in the offer of countries of CEE due to the poor local and international development and due to the great potential that it presents. The choice made is based also on financial and technical reasons given the present market funding sources (public sources: money from the EBRD and non-refundable funds: ERDF and private sources: capital contribution, loans or leasing).

5. Conclusions

1. *As it is well known there are two categories of factors that motivate tourist demand: endogenous factors (motivation, income and free time) and exogenous factors.* People travel because they are: activated as a result of the action of internal factors (push factors) and attracted as a result of external factors, dependent on the destination features (pull factors). Traditionally, activation factors explain the desire to go on holiday, while the attractiveness factors explain the choice of destination. The activation factors are: socio-psychological reasons, explain the desire to go on holiday, their action - refers to any destination on the tourist market and the attractiveness factors: motivations determined by a particular destination, explain the choice of a destination; their action - refers to a specific destination on the tourist market. That being said, it is observed that in 2010 in tourism the predominated type of factors in choosing a tourist destination were the pull factors.

2. *Considering the touristic offer and also the touristic potential of the European countries we have identified the following potential niche market from which we have chosen to detail only two elements: rural tourism and ecotourism.*

3. *The major obstacle in the way of the development of the hotel industry from Europe versus the opportunities*

It has become increasingly obvious that fact that the region of Europe especially CEE represents a very attractive location for the international hotel chains, not only for the luxury sector but also for the middle section or the budget section. However, foreign companies look with skepticism onto this market mainly due to the following factors: political instability, lack of local capital, uncertainty of the property right and lack of infrastructure (here we refer to Central and Eastern Europe). In terms of **political stability**, there are signs that the established democratic regime is respected and it acts according to the criterion of

freedom of decision. What remained to be done now is to carry out awareness campaigns for possible investors about the real state of the new democratic states. Regarding the second barrier, **the eradication of corruption** is much more difficult to fulfill. Two international chains such as Accor and Bass have made ambitious investments in the region, their success being a starting point for their competitors. **The lack of local capital** cannot be changed overnight, although there are positive signs from the creation of institutions that could help local investors in the hotel industry. For example, the countries that have recently joined the EU, as is the case of Romania, have benefited from the help of the EU pre-accession and structural funds meant for the reconstruction and elimination of disparities compared to the other members of the Union. Regarding **the ambiguity of property** it exists in many new countries that have joined the European Union. **The infrastructure** has also benefited from the European Union funds (ISPA and Transport SOP) with which there have been rehabilitated whole kilometers of rail and road infrastructure. A still weak point of this problem is the motorway network that is still underdeveloped in the region.

All these barriers identified in this study must be removed in order to ensure the continuity and sustainability of the hotel business. The present work provides a remarkable contribution to the literature in this field. It may be one of the few sources of information on the influence of the present financial crisis on tourism, especially on the hotel industry and a starting point for potential investors in the tourism sector in Central and Eastern Europe. There are presented two niche tourism products: rural tourism and ecotourism through whose regulation and practice there will be an increase in the number of inbound visitors but especially outbound ones in the analyzed region. One must keep in mind that the two products mentioned above represent a priority of the European Commission in order to realise a sustainable tourism and to accomplish the objectives of the legislative package on climate change due to pollution.

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THE IMPACT OF THE CRISIS ON THE QUALITY OF LIFE AND SOLUTIONS TO REDUCE THE CRISIS EFFECTS. CASE STUDY: ROMANIA

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The economic crisis creates a series of consequences such as loss of jobs, reducing wages, insecurity of the population, reducing standard of living, material hardships, low self-confidence and hope for the better, illnesses, altered human relationships, social protests, ever greater scale strikes, in other words, deterioration of the economic environment.

This paper aims to identify possible solutions to improve the effects of the crisis on the quality of life, based on figures from surveys conducted by research firms and the possible correlations to be made between these dates, without attempting to consider that these solutions are unique or the best. The main indicators considered for identifying the negative aspects of the crisis among the population are: the evolution of unemployment, changes in gross domestic product or wage developments in the economy and the share of expenditure linked to the basic needs out of the income earned. Regarding the possible solutions to reduce the population crisis, they are closely related to the credit and monetary policy, and also to the budgetary policy.

Under the impact of the economic crisis, the business environment in Romania has suffered. Sub impactul crizei economice, mediul de afaceri din Romania a avut de suferit. Since most investments in 2008 were of foreign origin, the fact that this crisis has affected Romania as well did not surprise anyone. Nowadays Romania's business climate is characterized by lack of direct foreign investments and self funding sources whereas the population declares itself in a large proportion –more than 50% - to be affected by the crisis (1).

Effects of the crisis can also be observed in the evolution of consumers' behavior who fearing layoffs and declining revenue, not only turned to buying the same products or to purchase cheaper products, but also to reducing the amount of the purchased products. The quality of social life is essential and strongly related to stimulating economic activity. Satisfaction felt by the consumer will determine the level of consumption and will influence and ultimately decide the supply level. An adequate economic policy in Romania to restore the balance between supply and demand in the market may induce a state of economic recovery. This should be the objective of anti-crisis policies.

Keywords: crisis, quality of life, unemployment rate, gross domestic product, wages rate, social conditions of life, economic environment

JEL: F41, F41, J17

1. The quality of life in the current crisis

The direct impact of the crisis on the population leads to altered social conditions of life. A social indicator for the economic crisis assessment is the *evolution of the unemployment rate*. Given the systemic nature of the global economy, the problems the U.S. economy was confronted with were felt and widespread in Europe and, of course, on other continents as well. If in 2007, the improvement of the economic conditions, those of the labour market included, resulted in an employment rate of the labour force at European level of 68% and a decrease in the unemployment rate up to 7% unemployment rate, in 2009 the unemployment rate increased by 2.2 percent, reaching 11% in 2010, and the employment rate decreased by 2.5% in the EU.

Another relevant indicator is *the evolution of the gross domestic product*. In 2009 as compared to the year 2008, the GDP decreased by 4.1% for the euro area and by 4.3% on average for the 27 European countries.

Inevitably, the economic crisis effects were felt in Romania as well. Studies have shown that, given the global recession, the number of bankruptcy cases has increased significantly up to the half of the year 2009. In Romania, for instance, the number of bankruptcies increased by 27% during 2008-2009, although 2008 had been a record year in this respect - for companies in Romania bankruptcies nearly doubled in 2008 compared to 2007 and most of them were in the trade. Moreover, there are a number of sectors affected strongly by bankruptcy: trade, distribution, wood and wood products manufacture (412 cases), transport (causes: the increase of fuel prices, which led to the insolvency of small carriers) construction, textile, manufacturing, hospitality sector (causes: poor competitiveness, lack of qualified personnel, poor management strategy) the catering and automotive industry, the areas with the lowest risk, where they recorded the fewest cases of insolvency, are producing and supplying electricity and heat, water and gas, metallurgy, financial intermediation, telecommunications and IT. For example, in Romania since 2008, the number of payments made under conditions of insolvency has increased the production twice and three times that of wholesale and retail trade, construction and only in the construction industry were recorded 10 or more payments in circumstances of insolvency.

In Romania, the crisis in the construction sector has caused problems to companies in the wood industry, leading to lower orders and financial difficulties among companies in the forest administration. The annual review of working time evolution also revealed that the length of the workweek reflected a clear distinction among the 27: only 13 of the EU countries had working weeks longer than the EU average. The longer working week was recorded in Romania, where full time employees were working, on average, about 41.8 hours a week.

Regarding *the evolution of wages* between 2008 and 2007, all EU countries have recorded increases in average wages agreed in collective agreements. However, the surge in inflation rate has reduced the wages rise set in the collective agreements, from 3.6% in 2007 to 1.3% in 2008 in real terms. In countries where real wages have still continued to grow (and for Romania), increases were much lower in 2008 than in 2007.

It is obvious that there are differences and similarities between Member States in Europe. Yet the satisfaction levels vary significantly among social groups: people with higher incomes, better health status, secure jobs and higher levels of education are generally more satisfied with their lives. Although Bulgaria and Romania have a similar GDP per capita, the level of satisfaction in Romania is much higher than in Bulgaria. Consequently, there is no proportional relationship between national income and level of satisfaction. 70% of EU

citizens have a dwelling, and nearly half of them hold it definitively, without any mortgage or loan. The proportion of people with home ownership is much higher in countries of Central and Eastern Europe where, on average, 74% of citizens have total ownership of the housing, the highest proportion being recorded in Romania (87%) -this high percentage of ownership does not translate into a higher quality of housing.

The recession of 2008 has fundamentally changed the living conditions of many European citizens, causing for Romania a decline of the possibilities to provide the basic needs: adequate warming of the house, an annual holiday, new furniture to replace old furniture, a meal that includes meat, chicken or fish every other day, new clothes and means of taking care of guests at home a meal that includes meat, chicken or fish every other day, new clothes and means of taking care of guests at home - from 30% in 2007 to 26% in 2009, significant differences being perceived throughout the country as well: 25% of the poorest people lack four of six items, while a percentage of 25% of the wealthiest citizens t lack only one element. In Turkey, the Former Yugoslav Republic of Macedonia, Bulgaria, Romania, Hungary, Lithuania, Slovakia and Latvia, 25% of the richest people suffer from many shortcomings than the poorest 25% in Denmark, Sweden, Luxembourg and the Netherlands.

There is an obvious downward trend in Europe from 2007 to 2009 in nearly all states regarding the satisfaction with the level of living. In Romania, this trend is sudden, the largest decline in satisfaction with the level of living were recorded among people of 65 or more who have suffered the greatest decrease in quality of life in general as a result of the fall in the purchasing power of pensions.

Regarding the evolution of the number of jobs, it is shown in the following table (*table no. 1*):

Table no. 1 Jobs lost and created by sectors in 2009-2010

Fields of activity	Nr. jobs lost / created
Automobile production	-70377
Financial intermediation	-57417
Public administration and defence	-46802
Trade	-44621
Machinery and equipment production	-42545
Post and telecommunications	-35452
Metallurgy	-23770
Road transport	-22712
Electric equipment production	-21358
Food and drink production	-20466
Financial intermediation	6215
Computer and related activities	6470
Coal Mining	7650
Other economic activities	8592
Post and telecommunications	8860
Electricity, gas and hot water supply	11510
Automobile production	12744
Public administration and defence	13999

Hotels and restaurants	22220
Retail	47157

Source: adapted from <http://www.eurofound.europa.eu/pubdocs/2010/16/ro/1/EF1016RO.pdf>.

The Romanian economy has lost more than 370,000 jobs over the last year. *In late 2009, the number of employees had fallen from 4.73 million jobs to 4.36 million. 40% of the jobs lost in 2009 belonged to the construction and industry field.* At the end of 2009, the number of employees fell from 4.73 million jobs to 4.36 million. 40% of the jobs lost in 2009 and belonged to the construction industry. After 2005, over a third of the new jobs have been created by the state, and personnel costs incurred by public money have doubled the budget. The fact is that the missing 370,000 jobs by the end of 2009 equal the number of jobs created in five years of economic boom.

2. Anti-crisis solutions:

There are a number of protectionist measures to be found in the specialized literature meant to diminish the effects of the crisis. -

In his book *Après la démocratie*, Emmanuel Todd (2), considers that when confronted with the "brutality" of the crisis and of the unemployment rise, more and more people were in favour of the strengthening of protectionist measures, starting with a form of "European protectionism "done in the name of" a necessary correspondence between economic and social spaces. " This solution is proposed taking into account the fact that rising wages will encourage consumers to absorb more of the market offered, resulting therefore in real possibilities of production relaunching.

Michel Aglietta (3) believes that, given the current crisis, the adoption of protectionist measures could be a factor that deepens the crisis and brings along the risk of damaging relations between states, this claim is based on the fact that a concerted international action is absolutely necessary for successful implementation of existing measures to halt the crisis. Even if the European protectionism helped the economies of European countries in fighting against the international market, there are factors that hinder the adoption and implementation of protectionist measures in the EU domestic policy, factors resulting from the differences between the economic development of EU countries.

Michel Aglietta believes that Europe has been profoundly affected during this period of crisis (4) because of the absence of a robust and well-based industrial policy, and also due to the promotion of a clear policy against competition coming from outside the EU. In this context, the research and development policies remain the national ones, generating an unnecessary competition between companies from different EU countries, a process also exacerbated by political sensitivities between countries; EU holds its own responsibility because it supported the fight for the dominant position in the EU through protectionist measures against other areas, America, Asia, this European protectionism preventing firms from moving towards the development of extra-European activities. -

Referring to the book written by Emmanuel Todd, Daniel Bensaïd asks in his article "Keynes et après? (5) "to protect? whom and against whom? If Europe started by adopting social measures of convergence in terms of jobs, income, social protection, labour rights, harmonization of taxation, then Europe might legitimize the adoption of protective measures and not the interests of selfish industrialists and those in the financial environment whom it favours." Europe could help the developed countries in supporting the joint development

through agreements with less developed countries in terms of migration, technical cooperation, fair trade. Without these measures, he believes, the protectionism of the rich would have negative consequences upon these developing countries as main effects.

One of the measures put forward in order to reduce the impact of the crises upon the European Union countries, is a European economic recovery plan (6), which has proposed to come not only with supporting solutions for EU countries, but also practical help in this regard.

Thus, the plan devised at the European level aims at using all available means and instruments of action at EU and national level; it is a plan meant ultimately to lead to economic growth and creating jobs by means of the objectives to promote economic recovery and that lead, ultimately, to economic growth and creating jobs.

The strategic objectives of the Recovery Plan were:

- stimulate demand and consumer confidence;
- harmonization of market conditions with the requirements in terms of competitiveness by stimulating economic growth and new jobs;
- stimulate economic activity without affecting the environment security.

To achieve these objectives, there were proposed concrete measures that can be implemented in the economies of EU countries with the aid provided by EU institutions.

The monetary and credit policy - is vital when in crisis and must be managed carefully by the bank that carries it out - the European Central Bank ECB. In this respect, the ECB has created a drop in euro zone interest rates to stabilize the markets by lending money to supply banks with cash to help their clients. Similarly, the European Investment Bank EIB will increase by about 15 billion its annual interventions in the EU countries' economies by providing loans to positively influence and lead these national economy out of recession whereas the European Bank for Reconstruction and Development will help the new Member States with 500 million per year to get out of recession and to start the economic recovery.

Budget policy – within the national budgets for 2009, and then for 2010 there were measures to be taken requiring an amount of approx. 170 billion or 1.2% of GDP at EU level so as to produce positive effects, and, if possible, long term ones: to boost purchasing power of consumers by improving the functionality of market adoption of emergency measures to strengthen the link between wage-fixing mechanism and the evolution of productivity, employment policy supporting and facilitating labour market transitions, reducing administrative costs.

For blurring effects of the crisis on global business environment, the Government Strategy for improving the business environment 2010-2011 proposes a number of measures to be implemented with minimal cost: restoring flows of foreign capital, promoting responsible business conduct, reduce trade costs and providing national consulting firms to solve the crisis.

The government provides a series of actions aimed at:

- improving the dialogue by creating public-private consultations designed to ensure greater transparency in the regulations;
- supporting the business environment by encouraging freelance professions;
- developing the cooperation with specialized departments of the central government institutions.

The EU has published recommendations in individual reports on each Member State to achieve the objectives of the annual package "Lisbon". These recommendations have as a

major priority the protection of the European citizens regarding the consequences of the financial crisis and the implementation of several policies such as integration, retraining, valuation of professional competencies, especially in what the licensed unemployed workers are concerned.

Conclusions:

Many economists, coming from different socio-cultural spaces, aim at finding further reforms for getting out the crisis. Their dilemma lies in the fact that I cannot answer exactly to what extent the preservation of capitalist structures, as they were promoted through the writings of the interwar reformers can still be possible under current conditions. For Romania, the confidence in overcoming the crisis is still, the lowest in Europe. However, the direction is positive: in 2011 the population confidence index measured by the Consumer Confidence Barometer for the European Commission has recorded an average increase compared to the average of the year 2010, reaching -46 to -54, showing the Romanians more optimistic especially at the beginning of the year.

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COMMON AGRICULTURAL POLICY FROM HEALTH CHECK DECISIONS TO THE POST-2013 REFORM

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The paper proposed for being presented belongs to the field research “International Affairs and European Integration”. The paper entitled “Common Agricultural Policy from Health Check decisions to the post-2013 reform” aims to analyze the Common Agricultural Policy (CAP) from the Health Check adoption in November 2008 to a new reform post-2013. The objectives of the paper are the presentation of the Health Check with its advantages and disadvantages as well as the analysis of the opportunity of a new European policy and its reforming having in view that the analysis of Health Check condition was considered a compromise.

The paper is related to the internal and international research consisting in several books, studies, documents that analyze the particularities of the most debated, controversial and reformed EU policy. A personal study is represented by the first report within the PhD paper called “The reform of CAP and its implications for Romania’s agriculture”(coordinator prof. Gheorghe Hurduzeu PhD, Academy of Economic Studies Bucharest, Faculty of International Business, research studies in the period 2009-2012).

The research methodology used consists in collecting and analysis data from national and international publications, their validation, followed by a dissemination of the results in order to express a personal opinion regarding CAP and its reform. The results of the research consist in proving the opportunity of a new reform due to the fact that Health Check belongs already to the past. The paper belongs to the field research mentioned, in the attempt to prove the opportunity of building a new EU agricultural policy.

The challenges CAP is facing are: food safety, environmental and climate changes, territorial balance as well as new challenges-improving sustainable management of natural resources, maintaining competitiveness in the context of globalization growth, strengthening EU cohesion in rural areas, increasing the support of CAP for member states, farmers and active farmers-, sign in outlining the CAP contribution to the “EU 2020 Strategy”.

This paper aims to prove that the future CAP should become a more sustainable, balanced, better focused, simpler and more efficient, more responsible to the needs and expectations of EU citizens.

Key words: Common Agricultural Policy, reform, rural development, Health Check, EU 2020 Strategy

JEL Classification Code: Q18, O13, F59

I. Introduction

The paper presented belongs to the research field “International Affairs and European Integration”. Entitled “Common Agricultural Policy from Health Check decisions to the post-2013 reform”, it aims to analyze the Common Agricultural Policy (CAP) from the Health Check adoption in 2008 to a new reform post-2013 and tries to prove the need and importance of the reform. The objectives of the paper are the presentation of the Health

Check with its advantages and disadvantages as well as the opportunity of a new EU agricultural policy need and its reforming having in view that the analysis of the health condition of this policy was considered a compromise.

II. Analysis of the research

The paper is related to the internal and international research consisting in several books, studies and documents that analyze these aspects of the most debated, controversial and reformed EU policy. Health Check was analyzed by several Romanian and foreign authors, the conclusion being that it made only small technical steps in the path of the reform. The Communication of the European Commission regarding Health Check represents a document that define that so-called analysis of the Health Check. In this context, the opportunity of a new EU agricultural policy and its reforming represent a subject deeply debated by EU member states and as well as a theme analyzed through many studies, documents like the research made by big European think-tank, the position of European Commission and European Commissioner for agriculture, regarding CAP after 2013 regarding the needs of carrying on the reform. A personal study is represented by the first report within the PhD paper called “The reform of CAP and its implications for Romania’s agriculture”(coordinator prof. Gheorghe Hurduzeu PhD, Academy of Economic Studies Bucharest, Faculty of International Business, research studies in the period 2009-2012).

III. Research methodology

The research methodology used consists in collecting and analysis of internal and international data, their validation followed by the dissemination of the results with a view to building and expressing a personal position regarding CAP. Health Check belongs already to the past and for that reason the paper tries to prove the need of building a new EC agricultural policy and of reform.

IV. Results of the research

Following the collecting and analysis of data regarding CAP since 2008 to present and after 2013, the results of the research can be expressed by the need of building a new EU policy having in view that Health Check, through its changes, made only small steps in the direction of a new reform.

Common Agricultural Policy (CAP), one of the first common policies adopted by European Union (EU) has been, in over half of century of existence, the most debated, controversial, analyzed and reformed EU policy.

If in the beginning it was based on output subsidy and protection of internal market against non-European producers, subsequently subsidy aimed to support directly the income, not the stimulation of the production, focusing on rural development and environment protection.

Health Check was adopted in November 2008 by the ministers of agriculture of the EU member states following the political agreement regarding the health condition of CAP and represents a package of amendments to policy regulations, amendments of small steps only at technical level towards the reform. Considered as being a compromise, Health Check gave the member states a significant number of instruments to support the producers. The changes adopted solved difficult problems that the Fischler Reform didn’t in order to avoid being rejected by member states. So, intervention on markets is reduced, modulation is extended and decoupling is carried on:

- national milk quotas were supplemented with 1% per year, going to be eliminated in 2015;

- in case of wheat bread, buying from the market at intervention price were limited to 3 million tonnes (on the entire EU), interventions over this quantity being done through public auction (at a lower price);
- keeping land fallow was eliminated (set-aside-the obligation to let a part of lands not cultivated in order to limit the offer of products);
- modulation foresees that payments for farms that receive more than 5000 euro to be reduced by 10% till 2012 (and those for farms receiving more than 300,000 euro to be extra-reduced by 4%), money being transferred to the rural development budget;
- decoupling, essential result of the 2003 Reform, achieved by introducing the single payment scheme at farm level (and in case of new member states the single area payment) was imposed also to those subsectors from some countries that chose the maintaining of coupled support [Luca 2009b: 15]

Among the disadvantages of Health Check are:

- deficiency in the implementation of guidelines that were going to be written by each member state;
- refuse of the Commission to discuss a proposal in order to equalize the rates of direct payments in the entire EU;
- falling to adopt an upper limit to the level of direct farm payments, big farms being further the main beneficiaries of CAP, in contradiction with its objectives to support family farms and to preserve rural environment;

The main provisions of Health Check were those that involve the disappearance of market regulation tools and those of rebalancing production support (crop, livestock, horticulture, etc.). While at European level discussions were held on subjects like: management tools of food market production, modulation, conditionality, biodiversity, price volatility of agricultural products, environment protection, climate changes, etc., at internal level farmers protested against decisions taken by state institutions regarding: fuels excise duties reduction, low amount received as payment area and falling to pay it on time, market of agricultural products, low price received by farmers within the pathway to recovery.

Debates regarding limits and modulation finalized in decisions providing: low limitation: minimal limit to 1 ha or 100 euro; for Portugal, Hungary, Slovenia the limit remains 0,3 ha; upper limitation: no legislative measure; compulsory modulation: an increase of 5% distributed in 4 steps, starting with 2009 (2%) and 1% for 2010-2012; progressive modulation: an additional discount of 4% for farms over 300,000 ha.

Health Check resumes to less tools for market regulation and for funds transfer from the first pillar to the second one, financing of the rural development programs. Although most member states were aware that a reduction of agriculture budget could not be avoided, the debates within Health Check could not define a common position of member states, not even as principles, regarding the direction of the reform after 2013.

Health Check is already a matter of past, debates within EU are subject to the new CAP after 2013 and its reform.

After the extended public debate organized by the European Commission in early 2010, the Council discussed the reform over four successive presidencies, the European Parliament adopted a report by its own will regarding CAP after 2013. The conclusion after these discussions was that the future CAP should remain a strong common policy structured around its two pillars.

The CAP is facing challenges like: food safety, environment and climate changes and territorial balance. Although CAP has developed, many changes are still needed in order to answer to new challenges like the improving of the sustainable management of natural resources (water, biodiversity, soil), the maintenance of competitiveness in the conditions of globalization growth, the recovery of the diversity of agricultural structures and output in EU, the strengthening of the territorial and social cohesion in rural areas of EU, the increase of CAP support for member states, farmers and active farmers.

Responding to these challenges, CAP will also contribute to the “EU 2020 Strategy” concerning:

smart growth: by increasing resource efficiency through technology and innovation, developing high added value and quality of products, green technologies, investing in training, providing social incentives in rural areas; sustainable growth: ensuring sustainable land management through: providing environmental public goods, avoiding to lose biodiversity, promoting renewable energies, reducing gas emissions and developing the potential of rural areas; inclusive growth: by unlocking economic potential in rural areas, developing local markets and jobs, sustaining the restructuring of agriculture and supporting farmers’ income [European Commission]

The main three objectives of the future CAP are: viable food production, sustainable management of natural resources and climate action, balanced territorial development. The achievement of these objectives depends to the maintaining of public support for agriculture and rural areas.

An agricultural policy designed at EU level is necessary in order to ensure fair conditions with a common set of objectives, principles and rules and provides a more efficient use of budgetary resources than the coexistence of national policies.

The main orientation of the public debate is reflected by three general policy options which rely on the structure the policy’s two pillars: an enhanced Status-quo; a more balanced, focused and sustainable support; less market tools and reduced income support.

With a view to improve the quality of legislative proposals, the improvement of smart regulation, simplifying the policy and reduction of administrative charges are required.

An important step for such an important policy like CAP is represented by the fact that the Parliament will be involved together with the Commission in the process of taking decisions and will respond in a better way to the expectations of farmers, inhabitants in rural areas, to citizens in general. The legal proposals will be submitted later this year and legal documents might enter into force in 2014.

The future CAP represent a subject extremely debated in working-papers, reports and conferences by several European think-tanks having different profiles from international and commercial relations to land use and food safety. Among these are: Groupe de Brouges, French Institute for International Relations, Land Use Policy Group, European Centre for International Political Economy, Notre Europe, Agriculteurs de France.

Europe must stimulate the building of a modern agriculture, to create working places and to ensure a fair management of the EU agricultural area. The future CAP should contain a more equitable distributed first pillar and a second pillar focusing more on competitiveness and innovation, climate change and environment. A special attention should be given to the development of rural area.

CAP reform must continue in order to promote competitiveness, efficient use of resources,

adoption of appropriate measures in order to ensure food safety, social and territorial balance in the context of climate changes, taking into account the constraints of limited budgetary resources and the impact of the economic crisis in agriculture.

The future CAP should become a more sustainable, balanced, better targeted, simpler, more efficient, more responsible in order to meet expectations of the EU citizens.

V. Conclusions

The paper is related to the research papers in the field “International Affairs and European Integration” and tries to complete the studies regarding the opportunity of the CAP reform.

As Health Check represented only small steps in the direction of reform, being already a problem of past, the paper reflects the need of building a new CAP and of a reform post-2013. The new challenges CAP is facing will contribute to the “EU 2020 Strategy”.

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SOME ASPECTS CONCERNING THE DIPLOMATIC PROTECTION OFFERED BY THE EUROPEAN UNION FOR THE CITIZENS IN THE PRESENT ECONOMIC SITUATION

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Based on the particular meaning that is specific to European citizenship and that is involved in the practice of citizenship, it causes modern concepts of citizenship which are derived from the universal norms of citizenship.

It's important to underline that the European citizenship is a concept which does not replace the National citizenship, but it is a new modern concept which has a real connection with the national citizenship and why not connected with the Romanian citizenship.

From this point of view, emphasize in this paper that the diplomatic and consular authorities from member states of the Union have to guarantee the protection of the European citizens in third countries in which their state is not represented.

The cooperation of the diplomatic representatives is an important point for the Foreign Politic of the European Union.

Keywords: citizenship, European citizenship, diplomatic/consular protection, European Union

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I. Introduction

The introduction of citizenship of the Union constitutes one of the best-known innovations made by the Treaty signed at Maastricht on 17 February 1992¹. Significantly, Part two of the EC Treaty, which is expressly devoted to (and entitled) "Citizenship of the Union", is located immediately after "Principles"² and before "Community policies"³, which marks out its general importance within the system of the Treaty. Whereas the most direct and immediate precedent for the provisions at present set out in Arts 17-22 EC may be found in a proposal put forward by the Spanish Government during the Intergovernmental Conference which resulted in the adoption of the Maastricht Treaty⁴, the idea of identifying a status for individuals benefiting from the process of European integration and its correlative label of "citizen" of the Community or of the Union goes back to the early 1970s. Following an initial initiative at the Paris Summit in 1972, the subsequent summit in 1974 gave rise to a plan for a standard passport for all nationals of the Member States, which was to be followed by a passport union and a core of special rights characterizing the position of the Community citizen. In pursuance of the mandate conferred upon it by the summit, the relevant working party presented in 1975 the so-called Tindemans Report, which contained a chapter on the creation of a "Citizen's Europe".

Those initiatives of the national governments were followed by initiatives from the Commission⁵ and the European Parliament. The latter adopted a resolution on 12 December

1977⁶ and most significantly the *Draft Treaty establishing the European Union* of February 1984, Art. 3 proposed introducing citizenship of the Union⁷. The Single European Act of 17-18 February 1986 (“SEA”), which entered into force on 1 July 1987, did not make any contribution towards translating the numerous projects for Community citizenship into law, with the result that the expression itself did not appear in the Treaty despite the preparatory papers which had given rise to the presentation of the report of the Adonnino Committee on a people’s Europe. Nevertheless, as a result of the Maastricht Treaty, the progress made by European integration and the diminished importance of economic factors as the determinant for Community legislation, together with the emergence of a higher level of democracy in the Community’s institutional life, led to formal recognition of the notion of citizenship of the Union⁸ identifying a special status governed by Community rules for Community citizens.

European citizenship is often regarded by skeptics as a threat to national citizenship which has always been considered „the fortress of state sovereignty and of the national identity. According to Deloye, these fears are well grounded as the „European citizenship is the cause of the reorganization of identities.”¹⁰ Despite its complementary and dispersed nature, European citizenship is a challenge to the structure of the European identity or identities established by the nation-states¹¹. This is because most people assume that the acquisition of European citizenship involves creating a new European identity. The most appropriate example of this fact is Denmark’s rejection of the Maastricht Treaty, because of concerns expressed in this regard. Denmark’s negative response to the concept of European citizenship was followed by a statement of the Council of Europe underlining the fact that none of the provisions of the Maastricht Treaty would replace national citizenship¹². But not even the founding Treaties of the Communities - which stated that this should be “based on the substantiation of a union, as close as possible among the peoples of Europe”¹³ and not to create a new nation¹⁴ – represented satisfactory guarantees in this respect. As Deloye pointed out, any attempt to impose a new configuration of norms and identities by means of European citizenship will come up against the opposition of many social actors¹⁵.

The possibility of combining various levels of identity is confirmed in great part by the results of the Eurobarometer survey on European and national identity of 2002. Thus, 59% of the Europeans, unlike in 1999¹⁶ - when the figure was 52% - admit certain European components in their national identity¹⁷. In early 2004, after including the 10 candidate states, the figure fell by 3%¹⁸.

In the studies dedicated to this subject, an author considered that the appreciation of European citizenship is determined from the angle of the pre-existing factors of the social nature that creates identity¹⁹. According to another point of view expressed in these studies, European citizenship can be structured by law, and the continual progress - influenced by the gradual enhancement in the legal status - can provide the essential condition for an active European citizenship²⁰.

Therefore, several questions come up:

What is the right to consular protection for EU citizens?

Every citizen of the European Union who is in a country outside the EU, in which the Member State of which he/she is a national is not represented, is entitled to protection by the diplomatic or consular authorities of any Member State represented there. EU citizens are entitled to protection on the same conditions as the nationals of that State.

In 1995, Decision 95/553/EC was adopted by the representatives of the governments of the Member States to implement this entitlement.

What kind of assistance is provided?

When an EU citizen seeks such help, he or she must produce a passport or identity card as ***proof of nationality***. If these documents have been stolen or lost, the embassy may accept any other proof.

Diplomatic and consular representations giving protection have to treat a person seeking help as if he/she were a national of the Member State they represent.

The protection offered by embassies/consulates of other EU States comprises:

- Assistance in cases of *death*,
- Assistance in cases of serious *accident* or *illness*,
- Assistance in cases of *arrest* or *detention*,
- Assistance to victims of violent *crime*,
- The relief and *repatriation* of distressed Union citizens.

What is the European Commission doing in this area?

In November 2006, the Commission adopted a *Green Paper* on diplomatic and consular protection of EU citizens in third countries (COM(2006)712), which set out ideas to be considered for strengthening this right of EU citizens.

Following a public consultation, in December 2007 the Commission presented an **Action Plan** (COM(2007)767) entailing the proposed measures for 2007-2009. The plan focuses on enhancing consular protection and increasing awareness of this right among citizens. The Action Plan will be evaluated in the context of a Commission's Communication in March 2011²¹.

II. Definition of concept.

The history of the transformation of the individual in the community legal order begins with the artificial creation of the „market citizen”²², i.e. the person having economic freedoms, quality which confers him the judicial enforcement to play his role in the process of creating the single European Union market. The Economic European Community (EEC) Treaty contains provisions to that effect, and in 1962, even before the Court of Justice of the European Communities had acknowledged the direct effect of fundamental freedoms, the Commission adopted the point of view according to which the individuals in the Community legal order did not exercise their fundamental rights as simple factors of production, but as holders of civil rights. Illustrative in this respect is the Stauder case (1969) which dealt with the personal right of the petitioner who wished to purchase products subsidized by the European Community at a reduced price without having to reveal his identity.

We remind you that the European citizen is a person who has the nationality of a state included in the European Union, but, by contrast, holders of fundamental freedoms are all those upon whom the Community legal order has conferred such rights.

III. Analyses concerning the exercise of diplomatic protection by the Community for the benefit of citizens of the Union

According to the art. 20 EC the citizens of the Union, in the territory of a third country in which the Member State of which he or she is a national is not represented, have the right to

“protection by the diplomatic or consular authorities” of any Member State on the same conditions as the nationals of that State.

This article calls to mind the classic institution of the diplomatic protection of citizens, by virtue of which, provided that certain conditions are satisfied, there is a right to protection from the State for its own nationals who have been harmed by the conduct of another State in breach of international law²³.

Among the requirements which a State must satisfy in order lawfully to exercise diplomatic protection is that the individual in whose interest the State intervenes must be a national, although there are exceptional cases in which a State may exercise diplomatic protection in respect of non-nationals²⁴. The exercise of diplomatic protection by an international organization is, in contrast, somewhat controversial, it being accepted instead in the form of the so-called functional protection of the organization, where, as a result of the internationally unlawful conduct of a State to the detriment of one of the organization’s officials, the international organization suffers damage to its own institutional interests²⁵.

It is considered that the Community may act by way of diplomatic protection to safeguard its own interests, as, for instance, in the case of conduct of third countries resulting in injury to Community officials²⁶.

However, it cannot be inferred from the present state of development of general international law that the Community has the right to act to afford diplomatic protection *vis-à-vis* third countries which have damaged the interests of Member State nationals not connected with the Community by a relationship of service, but in a broad sense. The approach taken in the Community case-law does not appear at all consistent with the aforementioned rule of customary law.

In *Adams*²⁷ the Court of Justice did not deny that the Commission was under a duty to act to defend the applicant (who was not a national of a Member State) before the Swiss courts, where he had had criminal proceedings brought against him for having unlawfully disclosed to the Commission practices of a Swiss company which constituted an abuse of a dominant position; it merely rejected the accusation that the Commission had not so acted because it did not square with the facts. In a more recent judgment, the Court of First Instance dismissed a claim for damages for non-contractual liability based, *inter alia*, on an alleged infringement by the Commission of its duty to intervene actively with the authorities of Guinea-Bissau to obtain the immediate revocation of an unlawful seizure of a vessel flying the Greek flag and its immediate release. In rejecting this plea, the Court of First Instance observed that, from the purely factual point of view, there was no reason to doubt that the Commission Delegation in Guinea-Bissau had “fulfilled ... its duty to provide diplomatic protection to the master [of the seized vessel] and the applicant”²⁸. The Court of First Instance therefore seemed to presuppose that there was a power/duty on the part of the Commission to act to afford diplomatic protection in the face of internationally unlawful conduct on the part of a third country *vis-à-vis* a citizen of the Union, which consisted in the case in question of violation of an international treaty concluded with the Community.

The judgment, which lacks any reasoning with regard to the legal presupposition underlying it, was welcomed by those who accept that the possibility to act to provide diplomatic protection stems from the fact that the Community has international legal personality under Art. 281 EC²⁹.

The introduction of citizenship of the Union, with the resulting strengthening of the legal/political link between the citizen and the Union – even though it is not yet sufficiently

capable of evaluation in terms of its content – could afford arguments in support of the case-law which has just been discussed, which, as has been pointed out, seems to go beyond the rules which may be identified in the present state of development of general international law.

Thus, we may ask ourselves whether the European citizenship is a merely legal construction or whether it also exists in social reality. Different scientific disciplines answer differently to this question, varying with methodology. This is why it is possible to distinguish two main positions: the “multi-national” view and the “universal” view³⁰.

A multinational picture of Europe – which a traditional perspective, based on public international law – is drawn by an overview of the Union member states. The constitutional role of citizenship can be developed from the reserve of multi-leveled identities alone. Three results are worth to be mentioned:

- The view of the necessarily exclusive nature of the position of the individual in terms of citizenship does not do justice to the empirical facts; normative conclusions based thereon are problematic.

- One cannot presume that Union citizenship is lacking any kind of social basis.

- Such studies have shown that identities are particularly influenced by political discourses expressed in the media³¹.

In the last twelve years no other binding acts have been adopted on Consular protection and only recently, after 2006, under the pressure of the European Council and of the Commission the member states have agreed on some complementary and non-binding Guidelines on consular protection of EU citizens in third countries as well as on non-binding measures to counter crisis outside the territory of the EU (such as the notion of the “Lead State Concept” according to which a member state will on voluntary basis coordinate the consular protection in a specific third country and prepare if needed evacuation plans in case of disasters or of terrorists attacks)³².

What about Lisbon Treaty, here is another good question looking for an answer. Well, member states remain jealously attached to the former functions and even after the Lisbon Treaty they avoided a legislative role of the EU institutions by stating that “*Member States shall establish the necessary rules among themselves and start the international negotiations required to secure this protection*”. Moreover, a positive evolution could come out from the strengthened cooperation between the MS diplomatic missions with the new European Union External Action Service as defined by the Article 35 TEU (ex Article 20 TEU) which states that : “*The diplomatic and consular missions of the Member States and the Union delegations in third countries and international conferences, and their representations to international organizations, shall cooperate in ensuring that decisions defining Union positions and actions adopted pursuant to this Chapter are complied with and implemented. They shall step up cooperation by exchanging information and carrying out joint assessments. They shall contribute to the implementation of the right of citizens of the Union to protection in the territory of third countries as referred to in Article 20(2)(c) of the Treaty on the Functioning of the European Union and of the measures adopted pursuant to Article 23 of that Treaty*”³³.

IV. Conclusion

Latest developments in this area show that The Commission published on 23 March 2011 a Communication on consular protection which takes stock of the Action Plan 2007-2009 and

presents the future measures for the next years. The Commission also launched a *website on consular protection* for the citizen which will contain, among other useful information, the contact details of Member States consulates/embassies in all countries outside the EU.

Following the entry into force of the Lisbon Treaty, this protection is conferred directly on every EU citizen by Article 23 Treaty on the Functioning of the European Union. This right is also enshrined in Article 46 of the Charter of Fundamental Rights of the European Union. These fragmentations of the rights of citizens along the national borders and the European policy have created a new understanding of citizenship, which challenges the modern concept of it. Based on the particular meaning that is specific to European citizenship and that is involved in the practice of citizenship, it causes modern concepts of citizenship which are derived from the universal norms of citizenship.

V. Note

1) The Maastricht Treaty gave rise to the European Union. It entered into force on 1 November 1993 (OJ C 191, 29/7/1992);

2) Part one, Arts 1-16;

3) Part three, Arts 23-181a;

4) *Agence Europe*, 2 October 1990, No 1653;

5) Report in COM(75) 321 final of June 1975;

6) OJ C 299, 12/12/1977;

7) F. Capotorti, *Article 3 – Citoyenneté de l’Union*, in F. Capotorti, M. Hilf, F. Jacobs, J.-P. Jacqué, *Le traité d’Union européenne* (Éditions de l’Université de Bruxelles, Bruxelles, 1985) 33 ff;

8) For the *travaux préparatoires* leading up to the Maastricht Treaty as regards the introduction of citizenship of the European Union, see C. Closa, *The Concept of Citizenship in the Treaty on European Union*, *C.M.L. Rev.* (1992) 1137;

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11) Deloye, Y., *op. cit.* p. 211-215;

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- 21) accesat în martie 2009 http://ec.europa.eu/justice/policies/citizenship/diplomatic/policies_citizenship_diplomatic_en.htm;
- 22) H.P. Ipsen/G. Nicolaysen, Haager Kongres für Europarecht und Bericht über die aktuelle Entwicklung des Gemeinschaftsrechts, NJW 1964, 339 (340 at note 2); H.P. Ipsen, Europäisches Gemeinschaftsrecht, 1972, 187, 250 et seq., 742; Stefan Kadelbach în lucrarea Jean Monnet Working Paper 9/03 „Union Citizenship” - Max Planck Institute for Comparative Public Law and International Law, Heidelberg, 24-27 February 2003, pp. 5;
- 23) Note among the best-known international precedents, the judgment of the Permanent International Court of Justice in the *Mavrommatis Case CPJI Reports* (1924) Series A/B, No 2, 12, and the subsequent judgment in *The Panevezys-Saldutiskis Railway Case* (1939) CPJ, Series A/B, 1939, No 76. As far as learned articles, apart from textbooks, are concerned, see recently L. Condorelli, *La protection diplomatique et l'évolution de son domaine d'application actuelle*, *Rivista di diritto internazionale* (2003);
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FOREIGN DIRECT INVESTMENTS DURING FINANCIAL CRISES

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The fundamental idea of International capital flows is that short-term flows can be easily reversed, while flows on a longer time horizon are more stable. Crises are associated with withdrawals of short-term capital flows and growth of the foreign direct investment flows. The current crisis has meant a major decline of international capital flows, also of the foreign direct investment. The analysis in this article tries to establish *if and under which conditions foreign direct investments can bring greater stability during the crisis, comparing the evolution of foreign direct investments in the current crisis with their response in previous crises. We show that during previous crises foreign direct investments were stable, behaving differently from other types of capital. Yet, during the current crisis, foreign direct investments have proven to be not so stable and all the components declined, raising questions about the resumption of the positive trend. The stability of foreign direct investments in the past was given by the increase of mergers and acquisitions during the crisis, reflecting fire-sale FDI. This feature is not found in the current crisis as mergers and acquisitions were severely affected by the crises and recorded a major decline. The current paper is realized in the doctoral program entitled “PhD in economics at the standards of European knowledge- DoEsEc”, scientific coordinator Prof. PhD Rodica Zaharia, institution The Academy of Economic Studies Bucharest, Faculty of International Business, period of research 2009-2012.*

Keywords: foreign direct investment, financial crisis, fire-sale FDI, international capital flows, Asian crisis

JEL Classification: F30, F32, G21

I. Introduction

Potential positive effects generated by foreign direct investments(FDI), such as technology transfer, human capital formation, creating a more competitive business environment lead countries to create an investment climate more attractive to investors as above features, contribute to the economic growth and economic development. Short-term capital flows, as opposed to long-term flows, are considered to be reversed easily, being driven by interest rate differentials and exchange rate fluctuations leading to volatility in capital. FDI are associated with economic characteristics that involve a long time horizon, becoming more stable flows. (Bird and Rajan 2002: 2)

The present research aims to analyze the evolution of FDI during current financial crisis 2007-2010, making a comparison with the evolution of FDI during past crises and is part of the author's future PhD dissertation paper on the subject: “Foreign direct investments and their role on the economic development of Central and Eastern Europe. Comparative study Romania versus Poland.” The current paper is realized in the doctoral program entitled

“PhD in economics at the standards of European knowledge- DoEsEc”, scientific coordinator Prof. PhD Rodica Zaharia, institution The Academy of Economic Studies Bucharest, Faculty of International Business, period of research 2009-2012.

Increasing activity of multinational companies determine the importance of FDI in the global financial crisis. Alfaro and Chen (2010) highlights the fact that in 2007 FDI accounted for 17.2% of capital formation in developed countries and 12% in developing countries, while production of the foreign affiliates was 12% of global gross domestic product(GDP) and exports about one third. (Alfaro and Chen 2010:3)

Financial Crises generates both positive and negative effects on the activity of transnational companies in the economies affected by the crisis. Athukorala(2003) identify three positive effects of the collapse of currencies on FDI. Massive depreciations reduce local production costs and countries become more attractive for export-oriented foreign investments, FDI becoming in this way more profitable. A second effect would be the reducing investment costs due to reduced costs of the assets, as the demand decreases. Last but not least, anti-crisis package and new legislation regarding foreign control can create new opportunities for acquisitions and mergers. The negative effects refer to negative effect on domestic market-oriented foreign investment(Athukorala 2003:4-5)

Alfaro and Chen (2010) analyzing the behavior of subsidiaries of transnational companies during crisis, show that they are more stable compared to local firms, even if during normal periods, no major differences were found . The foreign companies respond much better to crisis than local firms do, even if they have the same economic features. Vertical links with the mother companies prove to be more powerful during crisis, while in case of horizontal links there is a greater risk of volatility. Foreign firms usually receive a financial support from parent companies if the case of worsening financial and credit conditions in the host country. During crisis taking place only at the level of host countries links with parent company provide higher stability, as the mother company is not affected by local crisis. (Alfaro and Chen 2010:2-6)

II. Previous crises and the evolution of FDI

Foreign portfolio investments are motivated by immediate financial gains and investment decisions don't have a long-term time horizon, thus they are very volatile, therefore foreign portfolio investments volatility can strongly affect capital flows during crises.

FDI is not a simply transfer of capital. They are associated with technology transfer, new marketing practices or management techniques. All these aspects involve a relationship on a long time horizon and their mobility is limited, being more stable than the remaining components of capital flows.

Although most of the literature highlights the fact that FDI is more stable than other forms of capital, there are studies that suggest otherwise. For example, Claessens et al. (1995) show that FDI volatility is as high as of any other type of investment.

At individual country level, Reinart and Rogoff (2008) analyzes the characteristics of the financial crisis erupted in 18 developed countries. As the importance of these crises is relatively low, the authors focused more on crises erupted in five states, whose consequences were more important: Spain (1977), Norway (1987), Finland (1991), Sweden (1991) and Japan (1992). The conclusions of the research show that financial crises have three common characteristics: a drastic reduction in asset prices, an important reduction in

production and the rising of unemployment, and the increase of the public debt to alarming figures. (Reinart and Rogoff 2008:2)

Lipsey (2001) analyzed the evolution of FDI in Mexico during the 1994 crisis. He highlights that between 1992-1993 FDI have doubled, but in the crisis year(1994) they fell by 15% and just over three years, in 1997 they returned to the pre-crisis values. But in this case, the portfolio investments fell by 75%, a much stronger decline than the one recorded by FDI, indicating that the latter are more stable (Lipsey 2001:7)

The most important global crises were considered by Poulsen and Hufbauer (2011) four in number: 1975, 1982, 1991 and 2001. In all these periods, are identified three common characteristics that have led to crises: global GDP has fallen below 2%, GDP fell by 1.5% compared to the average of the last five years and was at a minimum level compared to the levels earlier or over next 2 years. In these crises, following the oil shocks and recession during the '90, FDI have returned to pre-crisis levels after a period of approximately three years, but they were strongly supported by measures of global liberalization. (Poulsen and Hufbauer 2011:8)

Latin American currency crisis of 1982 led to a decline in investment flows to the region, FDI remaining still positive, although only in 1988 it will reach the levels recorded before the crisis. Instead, portfolio investments recorded negative values in 1983 and begin to recover only in 1988. (Lipsey 2001: 4-5).

The crisis in Southeast Asia 1997-1998 was the subject of numerous investigations. The way FDI and portfolio investments have evolved during the crisis are similar to the ones in Mexico in 1994: portfolio investments decreased by 40%, while FDI only by 13% in 1995.(UNCTAD, 2009).

According to Kiminsky and Reinhart (1998) Latin America has suffered during 1970-1995 more financial crisis than any other developing region, with 50% more compared to the countries in Asia or Eastern Europe. Although the characteristics of the crisis differ from one region to another, the crisis in East Asia borrows many of the characteristics of the Latin American crisis (volatile capital flows and a weak financial system) (Kiminsky and Reinhart 1998:1-5).

The literature regarding the link between FDI flows and financial crises brings up the phenomenon of "fire-sale FDI": the fact that FDI increase during crises. FDI are carried out on a long time horizon and are attracted by cheap assets arising during the liberalized regime crisis. 1997-1998 East Asian crisis has confirmed this theory, with the except of Indonesia, which has witnessed both a political and economic crisis. (Hill and Jongwanich 2009: 2)

If during the crisis in Latin America, FDI have fallen much less than other types of investments, the crisis in Mexico was similar, the FDI flows decreased but much less respecting to other form of capital and never became negative. In contrast, in East Asia, FDI inflows have registered a modest decline in 1998 but recovered in 1999 (Lipsey 2001: 15)

During financial crisis, the FDI to East Asia fell by 15%, this demonstrates that the massive withdrawal of capital was due to the other forms of capital, such as portfolio investments and bank loans, which dropped by 102% and 220%. (Athukorala 2003: 6-8).

Studying the behavior of foreign direct investments and foreign portfolio investments, Achayra et al (2009) show that in countries affected by the 1997 Asian crisis, there is a strong correlation between the two types of investments, which is a positive correlation

during non-crisis periods and a strong negative one during the crisis, concluding that the financial crisis in Asia has not represented a massive reduction in FDI to the countries of the region, but only a modest decline. Massive capital outflow was driven by other forms of capital: portfolio investments and bank loans (Achayra et al 2009: 20 -22)

III. Foreign direct investments during the 2007-2010 financial crisis

The crisis erupted in 2007 represented the collapse of foreign direct investments, being the biggest financial crisis since the Great Depression of 1930. It is characterized by rapid contagion to all world countries, the high speed with which it occurred, different intensities had over time, as well as over various components or different regions. (Milesi-Ferretti and Tille 2010:7-8) Began in the U.S.A, as a sub-prime crisis, has affected the entire financial structure of the country and then rapidly spread to non-financial sectors worldwide.

The global financial crisis led to a collapse of foreign direct investment flows worldwide. After reaching a new historical record in 2007, 2 trillion dollars as a result of four years of continual growth, foreign direct investment fell in 2008 by 14% at global level (UNCTAD 2009: 3). If developed countries were most affected, with a decline of 30% in 2008, the developing countries continued to attract FDI, 17% higher respecting to 2007. FDI continued to decline, the decrease being 30% globally in 2009 compared with 2008, while developed countries recorded a decline of 44%. Although in the previous year 2008, FDI to developing countries seemed not to be affected by the global crisis, in 2009, this category registered a decline of 24% (UNCTAD 2010: 3). All FDI components were adversely affected by the crisis, and countries have not only tried to attract new investment, but also tried to keep the existing ones.

Milesi-Ferretti and Tille (2010) identify three periods of crisis. The first starts in August 2007, once the beginning of the problems for Lehman Brothers when international capital flows declined in the banking flows in developed countries. Between late 2008 and early 2009, takes place the second stage of the crisis, characterized by the repatriation of capital flows, especially the banking loans. The last period of the crisis that began in the second half of 2009, representing a slight revival of non flows and banking in Asia and Latin America.(Milesi-Ferretti and Tille 2010:2)

As the financial crisis has affected the U.S.A and Western countries initially and then propagated at global level, FDI to developed countries fell the most, contributing heavily to the decrease in mergers and acquisitions by 67% in 2008 (Poulsen 2011:3). The reduction of mergers and acquisitions in the current trend is contrary to previous crises, when, by the nature of “fire-sale” phenomenon, the acquisition and mergers increased.

All FDI components recorded reductions, but the most important one was the one registered by equity investments, this being a signal that the revival of FDI flows may last for some time (Poulsen 2011:3)The decrease in global FDI since 2008 is the result of many factors, including global financial crisis, reduction of corporate profitability, the decline of the stock market, reducing of the global demand and reducing funding capabilities due to increased cost of credit (UNCTAD 2009,2010).If during the Asian crisis portfolio investments fell sharply, reaching even negative values, the period 2008-2009 is slightly different. Portfolio investment began to decline only in the second half of 2008, not being so volatile and began to rise slightly in 2009. (Hill and Jongwanich 2009: 18)

IV. Conclusions

Comparisons with past crisis can be considered insignificant because the magnitude of the current crisis is much higher than the previous ones. Foreign direct investment during current crisis dropped by significant values and reacted faster to the crisis respecting to the other forms of capital flows, showing that they are not so stable and can be as volatile as any other type of flows if the global economy is affected.

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**SUB – SECTION: EU SUSTAINABLE ECONOMIC
DEVELOPMENT AND COMPETITIVENESS**

LOCAL ACTION GROUPS - THE EUROPEAN INTEGRATION CATALYST FOR THE ROMANIAN RURAL AREA

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Romania has the highest share of European Union rural areas (44.9% in 2009), which generates and maintains a long series of regional disparities. Because of these disparities, the economy faces a number of elements that undermine the quality of human and social capital and reduces the potential for growth: precarious social and economic infrastructure, reduced access to markets and thus to goods, a low level of both economic cohesion and living standards, and a difficult access to education and training (leading to the underutilization of labor in rural areas, while major shortages in the labor market and increased migration phenomenon manifests).

In these circumstances the European Union LEADER initiative is an important chance for the development and tightening of the rural - urban continuum in Romania. A fundamental element of this initiative are the local action groups. These local action groups are conceived rather as an ad hoc framework for exchanging ideas, for debate on matters of local interest, on initiatives to boost economic activities. Thus, these local partnership structures can be self-organized by very real problems and directions: to promote a brand of product made in a certain area, the image of a tourist attraction, of traditional occupations, crafts of products, etc.

In this paper, the authors aim to highlight the difficulties of European integration for rural areas in the new Member States, considering that the LEADER initiative would be a good opportunity to accelerate this process. To emphasize this, a review of the progress in implementing the LAGs program in Central and Eastern Europe was undertaken. Also, we identified the success factors of this program based on the experience of the European Union developed countries. Finally, we provide arguments in favor of local action groups as the solution to the rural problem of Romania.

Keywords: local action groups, regional disparities, regional development policies.

JEL Codes: O18, R11, R58.

1. European integration of the rural area in the New Member States

After the "Purgatory" transition to a market economy of former Central and Eastern Europe communist countries, their process of modernization continued through the EU accession. But the integration into a developed European economic and social space is difficult and

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fragmented. Beyond the various measures and assessment of the convergence process, the peripheral area fragmentation of the EU due to centripetal and centrifugal forces of the integrating process is more than obvious. These differences are evident both on the national and regional dimensions, but also on other dimensions of the EU: institutional, economic, social, political, cultural, etc.. From this perspective, the authors consider that the most serious fracturing of space in the Central and Eastern EU is the one concerning the rural - urban areas. Disparities between urban and rural areas are by far the most conspicuous in the heterogenic landscape of the Central and Eastern EU both in synchronic and diachronic terms. Without insisting on the spatial distribution causality of economic activities, even under an optimistic attitude about the present (which would consider disparities as ephemeral), we are, however, concerned about the significant differences in the time horizon perception of the economic development. Often, Eurobarometers show net discrepancies in the assessment of economic development opportunities, degree of optimism, confidence in progress, etc. between residents in urban areas and those in rural areas. As shown in some studies (Cristescu A., Andreica. M.E., 2011) there are considerable differences even in the inflationary expectations in relation to the residential environment of individuals.

In these circumstances the European integration of Central and Eastern Europe former communist countries has an additional problem - the rural area.

Supported financially and institutionally through pre-accession funds (ISPA and SAPARD in particular), these countries have made great efforts to modernize their rural area. After the EU accession the new member states from Central and Eastern Europe have benefited from additional financial resources made available by the European Agricultural Guidance and Guarantee Fund. However, opportunities in the new Member States to improve the quality of European integration of the rural areas increased dramatically with the adoption of the European Agricultural Fund for Rural Development² (EAFRD). In accordance with EAFRD, Member States should develop and implement the National Rural Development Programs. An important component of these programs is the LEADER axis, which underlies the local action group (LAG) initiative in the new EU Member States.

LEADER is a European initiative for rural development that started in 1991 with LEADER I. It continued with LEADER II (1994 – 1999) and LEADER+ (2000 – 2006). Today it is the fourth thematic axis of the Rural Development Policy (2007-2013).

The aim of LEADER is to introduce a new approach to territorial rural development from bottom to top, integrated, that builds on identifying local needs and support local development strategies that combine one or more priority objectives - competitiveness (axis one) and life quality/diversification (axis three). LEADER target areas are geographically, socially and physically, homogeneous small territories that are often characterized by common traditions, local identity, common needs and expectations. The main aim of LEADER is to improve local governance in order to boost economic and social development and the main vehicle is given by LAGs. This is a local partnership made up of organizations from different socio-economic sectors.

Between 1991-2006 1143 LAGs were created in 25 EU Member States. Thus:

- 52 LAGs had the "Use of new know-how and new technologies" theme;
- 187 LAGs had the "Improving the Quality of Life in Rural Areas" theme;

² Council Regulation (EC) 1698/2005

- 114 LAGs had the "Adding value to local products" theme;
 - 235 LAGs had the "Best Use of Natural and Cultural Resources" theme.
- Of course, the differences in institutional culture and in the temporal moments of accession were significantly reflected in the LEADER initiative implementing (Table no 1).

Table no 1: LEADER implementation in the New Member States

Country	Implementation	Rural area (%)*	No of LAGs	Budget (mil. €)	LAGs surface		LAGs population	
					Km ²	% out of total surface	mil	% out of total population
Poland	2006-2008	39	167/80	30,44	125 500	39	7	18
Slovakia	2007-2013	43	11	-	-	-	0,1	2
Hungary	2006-2008	32	186/70	25	29 141	31	1,52	15,2
Slovenia	2004-2006	52	-	-	-	-	-	-
Czech Republic	2004-2007	26	133/70	6,53	4 748	6	0,32	3,1
Lithuania	2004-2006	33	49/39	2,715	-	-	-	-
Latvia	2004-2006	32	32/17	3	-	-	0,74	33
Estonia	2004-2006	31	/24	1,84	40 000	88	0,4	30
Bulgaria	2007-2009	29	11/11	-	-	-	0,22	2,9
Romania	2007-2013	46	120/0	14,5	90800	38	11,7	54,4

Source: http://ec.europa.eu/agriculture/rur/leaderplus/lagdb_ro.htm, *World Bank

As seen, the best results in implementing the LEADER are registered by Poland. According to European Commission reports, Poland has already completed the action for financial support of about 80 LAGs, covering 39% of the country and 18% of the population. In terms of eligible LAGs, Hungary has more than Poland (186 vs. 167, but the first has established only 70 LAGs and has a lower allocated budget). Hungary covers 31% of the country with the financed LAGs and 15,2% of the population.

Czech Republic select the same number of LAGs as Hungary (70 out of 133 eligible), but their activity is financed by almost a quarter of the budget allocated for Hungary. As a result, both Czech LAGs area and population are smaller compared to those of Hungary (6% out of total area and 3,1% out of total population).

Slovakia has 11 local partnerships that are ready to become LAGs (covering 2% of the country population), while Slovenia has a very consistent budget allocated to preparatory actions for LEADER implementation (about €19 millions).

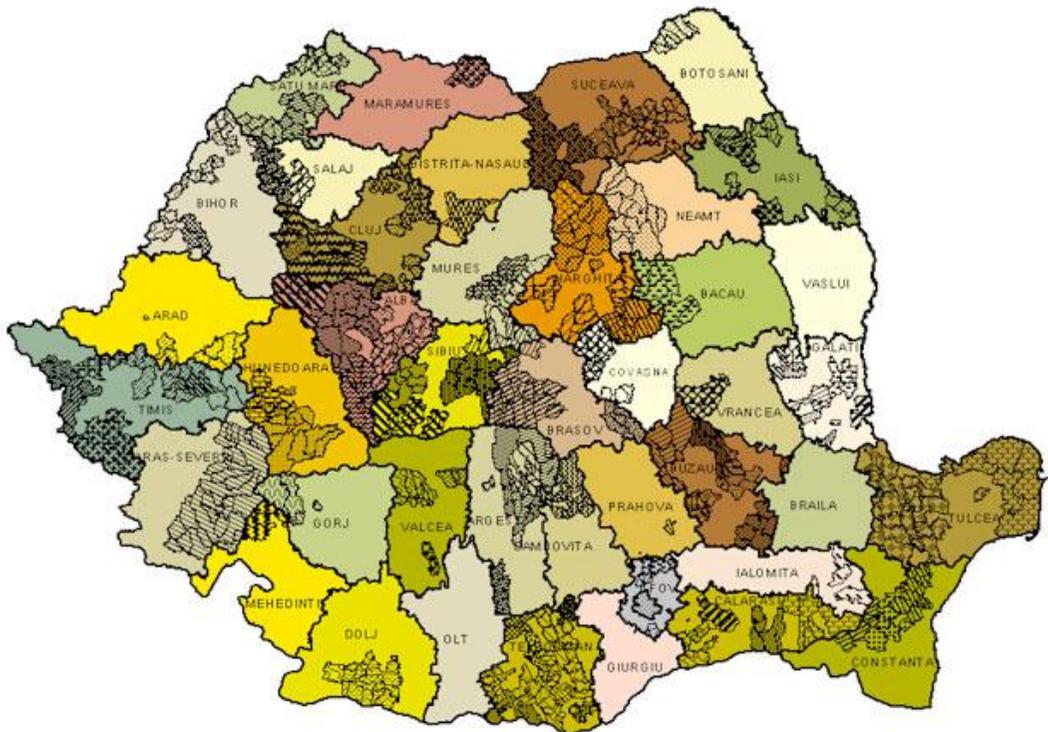
Although they have smaller budgets allocated for the LEADER implementation, the Baltic countries have already made significant advances in implementing this program. Thus, all three countries selected and funded LAGs, which comprise between 30% and 33% of their total population. Most funded LAGs are in Lithuania (29), followed by Estonia (24) and Latvia (17).

With a later EU accession, Bulgaria and Romania planned to implement the LEADER initiative between 2007-2013. At the program beginning, Bulgaria recorded 11 LAGs, while Romania has selected 120 sub-regions that were eligible to be funded as LAGs.

After analyzing³ the social, economic and geographical context, the territorial cohesion and its homogeneity, reported to the residents number and to the eligible area, considering the financial allocation for the LEADER axis and the interest of local actors, it has been estimated that following the selection procedures an approximate number of 80 LAGs can result in Romania.

Thus, the area eligible for LEADER comprises a population of approximately 11,7 million, of which about 2 million are from small cities with up to 20000 inhabitants. Therefore, 17% of LEADER eligible population may come from small towns and about 9% of the eligible area will be owned by cities.

³ <http://www.madr.ro/leader.php?prezentare=9>



Source: www.madr.ro

Fig. no 1: Map of potential Local Action Groups in Romania

2. The experience of EU more developed countries

Taking into account the experience of EU developed countries it seems that a good practice⁴ in implementing a LAG depends on the following factors:

-*Area-based approach*. This entails defining a development policy on the basis of an area's own particular situation, in terms of its strengths and weaknesses.

-*Bottom-up approach*. This aims to encourage participatory decision-making at the local level for all development policy aspects.

-*Partnership approach and the Local Action Group*. All the partners are invited to provide ideas about how to develop the project concept.

-*Innovation*. Three fields of innovation are important:

a.specialization: to learn about *quality instead of quantity* as a principle for agricultural development;

b.quality: the preparation of a project is based on a broad consultation about a clear innovation in the region;

c.marketing: learning about the importance of marketing innovative products and the necessity of marketing for goods produced by LAGs.

⁴ http://ec.europa.eu/agriculture/rur/leaderplus/lagdb_en.htm

-Integrated approach. The actions and projects contained in the local action plan are linked and coordinated as a coherent whole. The idea originated in the LAG, which aimed to find a widespread bottom-up support for it.

-Local financing and management. This means delegating to the LAG a proportion of the decision-making responsibilities for funding and management.

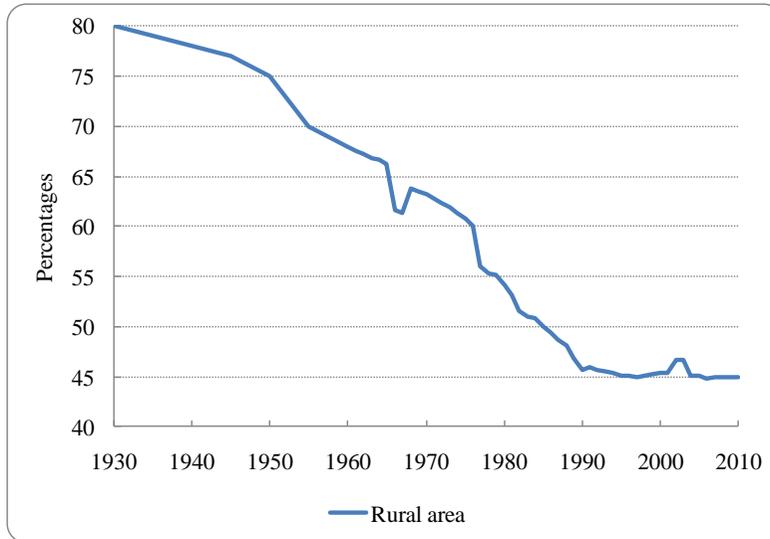
-Transferability. The action/project is transferable to other rural areas with similar geographical and economic characteristics.

-Sustainability. Projects developed by LAGs are conceived that in the long run will contribute a lot to the economic development of the agricultural sector in the region.

3. LAGs a possible solution for the Romanian rural problem

In Romania rural areas (87.1% of territory and 45.1% of population) are typified by a scattered population and very low quality infrastructure (only 33% of rural residents are connected to a water supply network, only 10% to a sewerage system and only 10% of rural roads are of adequate standard). Basic social infrastructure (health and education systems, finance and credit provision etc.) is also much less developed than in urban areas. These factors affect the quality of life in rural areas, hamper economic development, increase outmigration, and exacerbate health and environmental problems. The rural economy is highly dependent on agriculture and forestry, with low development of alternative activities, and lower incomes than urban areas. Moreover, the structure of gross domestic product creation is much different than that of the EU developed countries. We still have a large share of agriculture and even industry, while the share of services is significantly below the European average. The same with the structure and use of labor, which differs even more than that of EU developed countries, especially on account of population employed in agriculture. If we consider other factors such as access to education, quality of life, the differences between rural and urban economic and social infrastructure, then the factors that slows down economic development in Romania are even more obvious.

However, the problem of "rural burden" in development of Romania has historical traditions, which seem to contradict some legends such as "Bucharest - Little Paris" or "eternity was born in the village" and shows a significant structural gap between western economies and societies and ours (Fig. no 2).

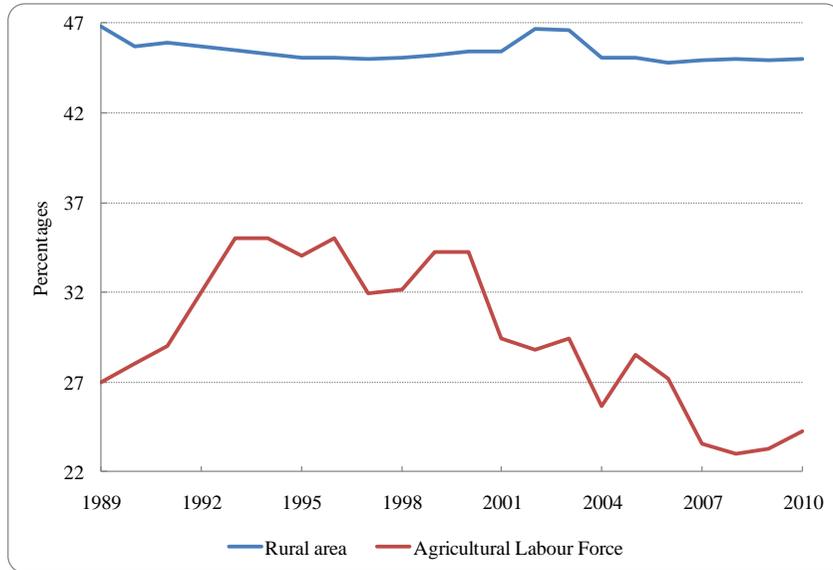


Source: made by the authors

Fig. no 2: Dynamics of rural population in Romania between 1930 - 2010

In the communist era the reduction of rural area was forced by different means, most often destructive (systematization planning program in the Ceausescu period). Even the transition to a market economy has failed to improve the situation given that urban-rural migration flows have exceeded the rural-urban flows in the last years, making the large share of the rural area a problem that blocks absolutely necessary structural economic mutations needed for modernization and European integration.

The agricultural sector is more important than in most other Member States, with 28,7% of the civilian population employed in agriculture and forestry, contributing 6,37% to GDP in 2009 (7,08% to total Gross Value Added), this being largely responsible for maintaining the high percentage of rural area (Fig. no 3).



Source: made by the authors

Fig. no 3: Trends of the population employed in agriculture and of the rural area between 1989 - 2010

The authors consider that given the urban deficit of Romania, the organization and development of LAGs could be a constructive solution to reduce the rural share and to revitalize the development of urban centers. But solving the rural problem exceeds the National Rural Development Plan (2013) horizon and tends to a medium or long run, considering that the rural share settled at a rate of 44-45% in the last decades. Therefore, for Romania, the LAGs initiative will remain current even after the completion of LEADER. By developing activities in rural networks around smaller towns, LAGs can economically and socially revive these centers accordingly to the theoretical model of Lössch (1940). In turn, these small towns can boost the development of urban centers. This can generate an economic growth effect having LAGs as growth poles.

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EUROPE AND ITS GREEN FUTURE. ELECTRIFICATION AND DECARBONIZATION

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This paper aims to present a great challenge which humanity faces, and which is climate change. Together with food and water shortages which will hit more and more humanity in the years ahead, climate change (which will only amplify these negative facts) will bring negative consequences on economy and society, and in international relations area, too. In this context, the importance of the subject speaks for itself. The research is focused on EU objectives in climate area and in sustainable development, indicating that renewable energy could be a solution for energy independence, and for reducing CO₂ concentration level, too.

The subject is very important one nowadays being subject of intense debates and negotiations, having a high degree of visibility in international forums and in international press.

The paper wants to show what EU aims in the future related to its development through fossil fuels consumption reduction and as a base for starting research are researched realized under the aegis of Group Futuribles from Paris, of the National Centre for Sustainable Development from Bucharest, from American Academy of Arts and Science, and International Energy Agency from Paris.

We take from IEA data and present them in the tables in order to have a synthetic view upon energy in EU countries, and of course, there are presented trends in energy consumption in renewable at European level. The development of the subject with the involvements in transport area only brings a fresh air in the debates regarding reducing energy vulnerability together with fighting climate changes.

There are presented some peculiarities of CO₂ pollution and their implications, and consequences; and of course, solutions for fighting climate change is part of this presentation. Reducing oil consumption and expanding renewable resources (wind, solar, and hydro) and nuclear energy coupled with the electrification of the economy and transportation sectors, and rising energy efficiency are of outmost importance in fighting climate change. Becoming leader in this area, EU aims not only to promote sustainable development, but to influence in a significant manner the future negotiations in climate area, gaining through this strategy a better position on the world scene.

The added value of our endeavor is in the superposed areas of EU energy independence, freeing transportation sector from the place of being hostage to potential oil crisis in the future, and all of these in the context of fighting climate change. The paper presents how energy independence could be obtained through renewable expansion, while fighting climate change, too.

Keywords: climate change, de-carbonization, electrification, transportation, energy efficiency

JEL Classification: O0, O3, Q4, Q5

Climate change – even if some of us don't think it is real – had already produced some visible effects, and the future, if the appropriate measures wouldn't be taken, reserve very different framework in comparison with which we are accustomed. The burning of fossil fuels (coal, oil and gas) is responsible for green house gas emissions, which bring the temperature's increasing, due to its concentration level's rising in the atmosphere. Nowadays at global level over 4/5 of energy is produced using fossil fuels (Malița 2009: 296). The industrialization process in last two centuries has put pressure upon Earth's resources and upon environment, nowadays humanity being menaced both by scarcity of resources, and global warming. Between 1900 and 2000 the temperature rose with 0,3-0,6 Celsius degree (Malița 1998: 213). Climate change experts concluded that the worst scenario which climate change brings could be avoided if CO₂ concentration level would be kept below 550 ppm (parts per million), which means twice the level specific to preindustrial times (Lester and Rosner 2009: 22).

The present CO₂ concentration level is 380 ppm, which, together with another 70 ppm CO₂ equivalent (resulted from nitrates oxides, and methane) gives a concentration of CO₂ equivalent of 450 ppm. The stabilization of CO₂ concentration at 450 ppm would bring in the long run a rising temperature by 2 degrees Celsius at global level. The stabilization of CO₂ concentration in the 450-550 ppm interval is the main focus of recent political debates, although it is noteworthy to be mentioned that at this level of concentration there would be *significant* economic and ecologic damages (Lester and Rosner 2009: 22).

In this context, EU wants to be a world leader in promoting a de-carbonization of economy and transportation, and rising of energy efficiency. The crisis which become so visible in the summer of 2008 could be regarded as a bell which rang and brought attention that the past and present trend would bring a slow, but a dangerous decline. In a world that rapidly may be nearing its ecological carrying capacity because of growth imperative – which in the past was the main reason for economic and military policies of developed states – there is nearing the day when the national interest will require a different articulation of well-being (Wendt 2007: 236). The role which state is asked to play is greater than in the past decades; the reduced degree of interventionism specific to this period when the neo-liberalism was the main economic doctrine will definitively be replaced by a rising role of the state, (Malița 2010: 29) which will regulate economic activity taking account of sustainable development, providing that kind of development which will bring well-being.

European Commission proposed in 2010 five targets to be reached until 2020, all of them defining the process at EU level and with the obligation of being transposed in national policies, one of them being directly related to *climate change and energy* (Gheorghiu 2010: 118). In 2007 EU adopted a new communal strategy for energy, the objective regarding security of supply being integrated with those related to consolidation of competition on the market and those related to climate changes. Even if after the Kyoto Protocol will expire without a new international accord being implemented, EU assumed *unilateral* measures to be taken: the targets 20-20-20 (Gheorghiu 2010: 121-122). These are: reducing greenhouse gas emissions with 20% in 2020 in comparison with 1990, increasing the share of renewable

energy in energetic mix from 7% (2006) to 20% in 2020 in total energy consumption, and rising energy efficiency in order to save 20% of primary energy in EU. It could be noted the role which state is ask to play in order to direct and coordinate national policies for these objective's achievement, its role being felt even in relation with third countries, which don't implement policies which would constrain their economic through pollution taxation. The strategies for achieving this are (Abbas 2009: 53-67): trade liberalization as stimulus for combating climate changes; renegotiating of new accords, taking account of reducing competition in EU countries due to taxes imposed on pollution; derogation from the multilateral norms; and putting in place a mixed governance World Trade Organization – The Climate Change Framework Convention.

What is a focal point regarding energy is the fact that energy security and climate change could push both of them to promote energy efficiency, and de-carbonization of economy. They are expected to encourage the development of renewable energy for electricity in many parts of the world, and as EU wants to be a leader in fighting climate change (being in the same time very vulnerable in energy field), she have to rethink its strategy related to nuclear power. Even with a significant increase of wind and hydro capacities (where there is potential) in EU countries, if nuclear option is not on the decision table, then fighting climate change could be very costly, even without expected results. Renewable energy sources are quite important for electricity generation worldwide; it amounted to 3470 TWh (2006), or 18% of total output (IEA 2008: 149). In Reference Scenario, it rises to 4970 TWh (2015), and over 7700 TWh (2030), 23% of total electricity production, respectively (IEA 2008: 149).

The most important renewable are wind and hydro power, global output of wind expecting to rise eleven-fold, becoming the second-largest source of renewable electricity after hydro in 2010 (IEA 2008: 159). The *largest increase* is in the EU countries which in 2030 could have a share of wind power in its energy mix of 14%.

In 2006, seven of the top ten wind-power markets in the world are EU members.

Table no. 1. Wind-power in EU countries

Country	Installed capacity (GW)	Wind power production (TWh)	Share of total generation (%)
Germany	20,6	30,7	4,9
Spain	11,6	23	7,7
Denmark	3,1	6,1	13,4
Italy	2,1	3	1
United Kingdom	2	4,2	1,1
Portugal	1,7	2,9	6
France	1,6	2,2	0,4

World Energy Outlook 2008, IEA

There is potential for expanding this kind of energy in EU countries, especially in UK (which has the greatest potential), and France (which has the second potential in EU) (Florian et Temime 2008: 27). And this could be reached following a policy of encouragement from *states*; indeed, this is the case: the price of wind electricity is sustained in numerous countries through a tariff policy aimed at the development of renewable energies (Florian et Temime 2008: 31).

Hydropower is the world's largest renewable source of electricity, generating 3035 TWh (2006), around 16% of total electricity (IEA 2008: 402).

But there must be understood that the force of atoms could help generate energy in a clean manner, and together with renewable energy, to promote the increase of energy security through the development of alternative sources of energy, and decrease the concentration of CO₂ due to energy production.

In the nuclear field, EU countries are important players, one of them implementing the most successful nuclear program in the world – France. The potential of nuclear expansion in EU countries is quite large, but its expansion could head the opposition coming from different groups and institutions.

It is noteworthy to be mentioned that European countries depend nowadays in great part (some of them almost totally) on energy imported from other countries; the shift to nuclear, and other renewable resources could help them in mitigating climate change, in rising their energy security, and in promoting a better position in global negotiations regarding climate change. The European countries dependence on imported Russian gas is a hindrance in promoting a cohesive energy policy in EU at large, situation which is exploited with great success by Moscow through its giant arm – Gazprom. The dependence of European countries on Russian gas is presented in the following table (Table no. 2):

Table no. 2. European countries dependence on Russian gas

Country	Energy which is based on imported natural gas (%)
Bulgaria	100%
Slovakia	100%
Finland	100%
Estonia	100%
Letonia	100%
Lithuania	100%
Greece	84%
Austria	78%
Hungary	77%
Czech Republic	75%
Poland	63%
Romania	63%
Slovenia	51%
Germany	32%
Italy	32%
France	23%
The Netherlands	17%
Switzerland	13%

Eni S.p.A., World Oil and Gas Review, 2006

Anyway, the review made in *Germany* (and in other EU countries which after 1979 started to view nuclear energy with skepticism) regarding nuclear energy field in last years (but before March 2011) can be regarded as a positive mark related to nuclear energy renaissance in EU countries.

The present state of nuclear energy in EU countries is presented in the following table (Table no. 3).

Table no. 3. Situation of nuclear generating capacity and reactors in EU member countries

Country	Number of reactors	Installed nuclear capacity (MW)	Share of nuclear capacity installed in total at global level (%)
France	58	63130	17,05
Germany	17	20480	5,53
Sweden	10	8992	2,43
Spain	8	7450	2,01
Belgium	7	5863	1,58
Czech Republic	6	3678	0,99
Finland	4	2696	0,72
Hungary	4	1889	0,51
Slovakia	4	1762	0,47
Bulgaria	2	1906	0,52
Romania	2	1300	0,35

The Netherlands	1	482	0,13
Slovenia	1	666	0,18

IAEA, *Nuclear Power Plants Information (Number of Reactors in Operation Worldwide)* <http://www.iaea.org/cgi-bin/db.page.pl/pris.oprconst.htm>, (vized February 7, 2010);

IAEA, *Power Reactor Information System* <http://www.iaea.or.at/programmes/a2/>, (vized February 7, 2010)

Furthermore, there are in diverse construction phase six nuclear reactors in EU four member countries, the situation being detailed in (Table no. 4).

Table No. 4. Situation of nuclear power plants under construction in EU member countries

Country	Number of reactors	Nuclear capacity under construction (MW)
Bulgaria	2	1906
Finland	1	1600
France	1	1600
Slovakia	2	810

IAEA, *Nuclear Power Plants Information (Under Construction Reactors by Country)*, <http://www.iaea.or.at/programmes/a2/>, (vized February 7, 2010)

But as we can easy note, all these measures mean economy's de-carbonization, and electrification, too. This action will have a profound impact at economic, social, political, and environmental level. In all these fields, the implications are many: reducing energy vulnerability in a historical context in which the hungry for resources will be more and more acute (especially due to the rise of China and India, and due to population's number rising at global level); EU economy's de-carbonization and electrification means a greater energy independence, a vital aspect for national power, with ramifications in the currency area (for a country to have a strong currency, it needs energy independence).

Another area with high impact at economic, social, and political levels is transportation. Transportation's de-carbonization means not only the reduction of consumption of oil, improving energy independence of EU economies, but reducing the CO2 emissions from transportation sector. The climate change accuses the pollution resulted from fuel consumption in transportation as a factor which hurts a lot the environment; in fact, at EU level, over 50% of oil consumption is due to private cars, while some 30% of CO2 emissions in Europe is due to transportation, 84% of which is due to road transport. The de-carbonization of transportation sector means first and foremost that there must be developed new types of transport, while the internal combustion engine losing its primacy. This means a coherent policy at EU level in both areas: in *energy*, and *transportation*.

But these two elements are of outmost importance on each state's agenda in the modern and post-modern worlds. Energy independence means a greater flexibility in foreign policy, and reducing transportation's dependence on fossil fuels only amplifies this aspect: is case of international crises which involves interruption of energy flow, the movements of people and goods is provided by means of transport which aren't based on oil consumption; and in this way there is present a greater independence in mobility, element with strategic implication.

There are three major directions of action in the fields of energy and transportation. As energy production will become cleaner, the electrification of transportation sector is a

natural and direct consequence of this. In this way, new investments in clean energy sector can provide a stimulus for overcome present financial crises, these being simultaneously solutions for solving energy, and environmental crises. Rising the part of energy produced in a clean manner (solar, wind, hydro, and nuclear) while reducing fossil fuel consumption in nothing else than heading to sustainable development. Now, at EU level, the directions for transport de-carbonization are:

- in order to create mobility on medium and long distances the development of railways fitted for *high speed trains* is the best solution for decongestion of already crowded European highways, skies, and airports, saving simultaneously time, energy, and lowering pollution level;

- in order to create mobility on shorter distances the development of electric engines for cars is a solution which involves only reduction of oil consumption in transport, but if this is coupled with;

- the development of clean public means of transport such as tramways, bicycles, and metros (these especially in great urban concentration) coupled with reducing the number of autos, this will contribute to transport fluidization in urban areas, reducing noise, and pollution.

All these three direction have chances of success (there are already numerous examples in Western Europe cities, regions and countries), and this direction will make EU a good example of society which embraces sustainable development. It will be solved simultaneously the problem of crowded highways and airports without affecting mobility, there will be reduced pollution, noise, and the number of car accidents (already car since it was invented had killed more people than both world wars combined (Giddens 2009: 161)), and oil dependence will be attenuated, rising foreign policy independence, and the importance of EU on world stage, due to this reason, and in the climate change negotiations, too.

In this way, EU will obtain benefits internally through sustainable development, and externally, becoming the global leader in sustainable development and in climate negotiations, gaining for it a better position on world stage.

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ROMANIA'S ANSWER TO THE NEW DIRECTIONS OF THE REGIONAL DEVELOPMENT POLICY OF EUROPEAN UNION

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The regional development policy of European Union deals with spatial localisation of production and affects the daily life of more than half of the 500 million persons living in the European Union. Conceived at European level as a solidarity policy, it bases especially on financial solidarity through the distribution of a part of the European budget obtained through the contribution of Member States to the less prosper social categories and regions. Regional development policy of European Union for the programming period 2007- 2013 is based on the diversity, opportunities and challenges offered by the regions in Europe. It puts into practice the solidarity between European nations and focuses on a fundamental objective: strengthening the economic, social and territorial cohesion through diminishing the development discrepancies between its regions. The present paper identifies the new directions of the European regional development policy and aims to highlight the importance of this policy for the economic growth and development of Romania. In this difficult period, when Romania felt the effects of the crisis at high level and met a severe economic congestion, the European sources of financing through the regional development policy must not be neglected. We also formulate recommendations in order to increase Romania's structural funds absorption rate.

Key words: regional development policy, European Union, Romania, sustainable development, absorption rate

JEL Codes: R10, R11, R58

Introduction

The regional development policy is one of the most important and complex politics of European Union, position that comes from the fact that through its objective to reduce social and economic disparities existing between different regions of the European Union acts over significant development fields, such as economic development, transports, SME's sector, agriculture, urban development, environment protection, employment and professional training, education, etc. Conceived at European level as a solidarity policy, it bases especially on financial solidarity, through the distribution of a part of the European budget obtained through the contribution of Member States to the less prosper social categories and regions (for the period 2007-2013, the amount for the regional policy represents over a third from the EU budget). In fact, we can say that the regional development policy has a pronounced instrumental character and through its solidarity funds (Cohesion Fund, Structural Fund and Solidarity Fund) contribute to the financing of other politics – such as agriculture policy, social policy and environment protection policy. The present paper identifies the new directions of the European regional development policy and aims to highlight the importance of this policy for the economic growth and development of

Romania. In this difficult period, when Romania felt the effects of the crisis at high level and met a severe economic congestion, the European sources of financing through the regional development policy must not be neglected. We also formulate recommendations in order to increase Romania's structural funds absorption rate.

1. Concept and definition

The regional policy of European Union deals with spatial localisation of production and affects the daily life of more than half of the 500 million persons living in the European Union. The regional development policy implies different subsidies and development projects including infrastructure, education and training and SME's support in order to diminish the regional disparities. The main objective is to strengthen and raise the under-privileged areas potential as well as to strengthen and rebuild the unity between cohesion and diversity within the European Union (Capello et al. 2009: 568).

The regional policy of European Union has its roots in the desire to influence the economic adjustments in four types of regions. The first type of regions is characterised through the fact that the output is obtain mainly from the agriculture sector and in the same time the biggest part of population is occupied in the field of agriculture. These areas are usually underdeveloped country-side areas with low level of income per capita, high levels of unemployment and underdeveloped infrastructure. The second type of regions is those whose prosperity has been based on the industries that now lost importance, such as the steel, coal or textile industry. These are regions that could not keep up with technological changes and therefore could not face external competition (in some cases because of the excessive previous protection). In the case of those regions work force is the first affected when occurs a recession period. The third category of regions is formed of regions with a bigger percentage of the processing industry confronting with congestion and pollution problems. These regions benefit from high utilisation of goods and services. Regional policy will try to reduce the congestion and pollution problems from these areas and to prevent them from worsening. The last category of regions is the border ones, regions that are far from the powerful economic activity areas of a state or union (Capello et al. 2009: 633).

The regional development policy of the European Union has always been a controversial policy. The main reason for the polemic about it is the fact that it has an interventionist character. Those who do not trust the ability of governments are afraid that regional policy fines successful businesses from the prosper regions and encourages unprofitable businesses from the poor areas. Those who share this point of view consider that regional disparities are the inevitable result of the market system – a phenomenon that is tolerable up to a point in which the market evolution determines the migration of work force and of capital investment as well as expansion of commerce which automatically contributes to higher incomes. On the other hand, those who support regional policy and admit its importance are more sceptical regarding markets self-regulation ability and do not believe in the power of the market to solve traditional problems (El Agraa, 2007: 421).

2. Short retrospective of the regional development policy and its importance

The history of the European Union begins in **1957**, when the Treaty of Rome introduced the idea that the European Community should create a harmonious development through reducing discrepancies between regions and the economic differences between the member countries. It is well known the Great Britain case which had to take some measures to decrease the big unemployment rate in industrial areas.

In **1958** were introduced two funds: European Social Fund (ESF) and European Agricultural Guidance and Guarantee Fund (EAGGF). At the beginning, the regional development policy had a strong redistributive character.

The year **1975** brought the founding of the European Regional Development Fund (ERDF) to support the development projects launched by the national governments. The year 1975 is considered the birth year of the regional development policy, because it is the year that has a double significance: on one side, it is a component of the financial common help, meant to augment national efforts in order to reduce discrepancies existing in the European regions; on the other side, it was a mechanism of financial transfer from some Member states, such as Germany, towards other states (Dodescu and Giurgiu, 2008).

The adoption of the European Single Act in **1986** founds a real development policy meant to compensate constrains of a single market that was felt by Southern states and other regions less favoured. At this point was recognised the authority and necessity of a regional development policy, a policy whose main objective to be the reduction of disparities between different European regions, a diversity that was strengthened by the accession of the 6 new Member States.

In February 1988 the regional development policy was given specific objectives and the way of solidarity funds functioning. The content of the structural funds, as they were called now, suffered modifications in 1993 and 1995, and they were allocated 68 billion ECU (at the 1997 level of prices).

When the biggest enlargement of the European Union took place in 2004 and 2007, changes took place at the level of regional development policy as well. Only two of the twelve new accessed states had incomes per capita higher than Greece, EU15's poorest Member State. In this situation, on 2 February 2005, the European Commission took position and introduced the so called Integrated Strategic Lines for Growing and Occupation, where it is stated that the European Union must create an economy orientated towards sustainable growth and raising the work force employment rate.

3. New directions in the regional development policy of the European Union

After the enlargement in 2004 and 2007 the regional development policy of European Union entered into a new phase. The budgetary programming period 2007-2013 is the first one in which the new economic challenges are dealt by the regional development policy of EU (Stierle-Von Schutz et al. 2008: x).

Regional development policy of European Union for the programming period **2007- 2013** is based on the diversity, opportunities and challenges offered by the regions in Europe. It puts into practice the solidarity between European nations and focuses on a fundamental objective: *strengthening the economic, social and territorial cohesion through diminishing the development discrepancies between its regions*. Even though it focuses on poor regions in order to assist them in the process of fast retrieving the discrepancies, the investments from the new regional policy of European Union for the period 2007- 2013 aim, as a novelty, to have a significant *impact over the competitiveness of all regions and over the life status of their inhabitants (European Commission)*.

The priorities of the new Finance frame are different by those of the 2000 Agenda that focused on preparing the EU enlargement from May 2004. According to the Strategic Integrated Lines for Growing and Occupation, there were established for the regional development policy of the European Union for the period 2007-2013 3 priorities:

- Europe – a more attractive place for investments and work;
- The amendment of knowledge and innovation for growing;
- More and better work places.

The fifth report regarding economic, social and territorial cohesion shows that the regional development policy created workplaces, helped at building critical infrastructure and improved environment protection, especially in less developed areas. There is no doubt that without a regional development policy the disparities would be bigger. Even so, the social effects of the economic crisis, the innovation demand determined by global challenges and the necessity to utilise efficiently every Euro for public expenditures send a signal that there is still the need to do an ambitious reform of the policy. With the occasion of presenting the report, the EU commissioner for regional policy, Johannes Hahn, declared: *“how cohesion policy has had a major impact on the European economy, reducing economic differences and promoting environmental and social development. To ensure more value for money, we need to make the policy even more effective, in delivering concrete and measurable result. We need to spend more intelligently, focus on the EU's top priorities and add visible value to what national and regional authorities are already doing. The findings from this report and the consultation to follow will help us prepare a cohesion policy that is better adapted to the economic situation of today”* (European Commission a).

More recently, in order to accomplish its objectives the European Commission adopted Europe 2020, a very ambitious strategy for the coming decade. Its main target is to make Europe's economy become smart, sustainable and inclusive. The Lisbon strategy was first adopted in 2000, but during the 2005 mid-term review, the Lisbon Strategy has been reconsidered and established new targets on economic growth and employment. This change integrated the Cohesion policy into Lisbon Strategy's implementation. So at the moment we cannot speak about regional development policy without Europe 2020 strategy, because they are in a direct link. At European level, the Commission has chosen 5 headline targets in order to acquire the changes needed.

The targets set through the Europe 2020 strategy to be met at the end of 2020, consist of five indicators that are in direct relation to the citizens welfare. One of the targets refers to the percentage of the employed population and says that 75 % of the population aged 20-64 should be employed. Another target refers to the percentage of investment in research and development (R&D) and aims up to 3% of the EU's GDP should be invested in R&D. The third target is represented "20/20/20" and consists of a trinomial regarding climate/energy targets that should be met (including an increase to 30% of emissions reduction if the conditions are right). The fourth target refers to the share of early school leavers that should be under 10% and at least 40% of the younger generation should have a tertiary degree. The fifth indicator stipulates that the number of people living at the risk of poverty should decrease with 20 million.

4. Romania's answer

Romania joined the European Union in 2007, and became a direct beneficiary of the regional development policy. As at that moment the new Lisbon Strategy had just entered into force Romania was determined to accomplish the targets set at national level. A knowledge-based economy represented for Romania the great chance to bring added value to its products and services and increase their competitiveness (Dăianu, 2004). Romania adopted in 2007 the National Reform Programme for the period 2007-2010, whose main objective was to create a stronger economy and an attractive business environment in order to offer the welfare that every citizen wishes for himself and for his family. The targets set

at national level were in accordance to the Lisbon targets but they proved to be unachievable.

For the programming period 2007-2013, Romania has been allocated, through the Structural instruments an amount of **19.7 billion Euros**, implemented through seven **regional and sectoral operational programmes**, to which there are added eight territorial cooperation programmes with other states. In order to be able to implement the regional development policy Romania had to set up development regions. These regions are created through the will of neighbour counties, on the basis of the common European system, the system known as The Classification System of Territorial Units. According to this system, the 8 Romanian regions are level two units, which mean that their population is up to 2.8 million people.

It is estimated that structural instruments will stimulate economic growth in new Member states, including Romania; with an average of 6 % and that they will create about 2 million workplaces. Out of the 19.7 billion Euros allocated to Romania for the programming period 2007-2013, 19.2 billion are allocated for convergence and 455 million Euros for European territorial cooperation. The purpose of these programmes, defined through the regional policy of EU for Romania, it is the development of basic infrastructure according to the European standards, growing long-term competitiveness, developing and efficient using the human capital, development of the administrative capacity, promoting balanced territorial development. Concretely, it is aimed the GDP increase by 15-20 % up to 2015, growing the employment rate from 57.4% up to 64 % and investing in 1 400 km of new or rehabilitated highroads.

The objectives set are ambitious and in the same time welcomed for Romania, but they depend on the absorption rate of the structural funds, which, unfortunately for Romania, is very low. According to the Romanian Agency for Monitoring Structural Instruments, at the end of 2010 the absorption rate in Romania was 8.6%. This value is much under the average absorption rate of structural funds in neighbour countries, which is 17%, according to the last Report of the Financing Committee from 07.04.2011. The low absorption rate transforms Romania from a country that is a net recipient (receives more money from the European Union that gives as percentage of GDP) into a contributor to the European budget (Table 1).

Table 1: European funds allocated to Romania and Romania's contribution to the European budget for the period 2007-2011

	2007		2008		2009		2010		2011	
	mld.EUR	% din PIB								
Total European funds allocated	2.0	1.7	2.9	2.2	3.9	2.5	4.3	2.5	4.5	2.4
Romania's contribution to EU budget	1.2	1.0	1.4	1.0	1.2	0.8	1.3	0.8	1.3	0.7

Source: Economy and Finances Minister, National Statistics Institute, National Prognosis Commission and The National Bank of Romania, www.bnr.ro, accessed on 10.04.2011

On the other hand, in the autumn of 2010, Member States, in close co-operation with the Commission, established national targets and developed strategies for their implementation.

As the Annual growth survey shows, “they were invited to present by mid November, in a draft version, their National Reform Programme ("NRPs"), indicating their national targets and the necessary reforms to reach these targets and remove long-standing barriers to growth”. The fact that each Member State sets its own level of ambitions as regards the overall Europe 2020 targets is an important element of this strategy, ensuring that national targets are "politically owned" (European Commission b). So, in order to accomplish the Europe 2020 targets Romania has to adopt national targets to help us to keep on the track. The Romanian government has formulated provisional targets, but without an important change regarding structural funds approach it is almost impossible to meet these targets and get out of the economic crisis.

Conclusions

Romania severely needs to focus on structural instruments and raising structural funds absorption rate as it is a sure and free source of financing. Because of the world economic crisis that was felt in Romania in the last trimester of the year 2008, at the beginning of 2009 Romanian authorities had to contract a loan from the International Monetary Fund. The Romanian government obtained a loan of 19.5 billion Euros. Through this loan, the government financed the extern and intern deficit. On the other side, the International Monetary Fund imposed measures to guarantee the loan reimbursement and to obtain a transparent fiscal policy. This loan has to be reimbursed and this is for sure not good news for Romania.

Romania must pay attention to the great opportunity that regional policy offers through the structural funds, funds that are created in accordance to the Europe 2020 targets and that therefore have the great purpose of raising living standards in Romania. Unfortunately, regarding the living standard, our country is at the end of the top, fact that shows that we have many chapters where we have a deficit.

The main issues that detain Romania from European funds absorption are the different interpretation given to the Public Procurement Law and the routed custom to contest the results of the assignment procedure; also the coordination and control procedures in the Romanian legislation are sometimes less efficient than the EU Financing Regulations regarding the Structural Instruments, and the list can continue. We suggest a couple of solutions in order to help Romania increase its performance regarding the absorption rate of structural funds and have a better perspective regarding the importance of aligning its national priorities with those of the European Union. We consider that the legislation regarding public procurement and the implementing frame must be revised in order to raise the transparency level and simplify the procedures. We also recommend strengthening the coherence between the strategies regarding the Structural Instruments on one side, and the politics, programmes and national actions taken to encourage the economic and social development on the other side. To resume, we conclude that there is a stringent need to lower bureaucracy of the monitoring structures of Structural Instruments taking into consideration the European criteria.

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INTERNATIONAL BIOMASS TRADE AND SUSTAINABLE DEVELOPMENT: AN OVERVIEW

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It is crystal clear that the neoclassical economical theory, despite being probably the best growth model ever invented by man, tickled a cost of environmental degradation which can threaten our wealth and even our existence. For this reason, the concept of sustainable development (SD) is so empathic, being considered probably the best theoretical alternative invented by man to standard growth, because of its vision of a better world, where economics, society and environment are intimately linked. Thus, all human activities have to adapt to this new paradigm, in order to achieve its goals. From the economical perspective, production, consumption and trade must incorporate a kind of sustainable type of activity. In the recent years, growing demands in energy use and the increase of oil and coal prices, have led to the usage of new energy sources such as biomass, water, solar, wind and geothermal energy. This is why we propose in this paper to present an overview of international trade in biomass reported to the philosophy of SD. In short, we want to give an answer at two questions: how much is biomass trade sustainable and what risks may arise if the main source of energy used today, based on fossil fuels, will be totally substitute by biomass? To be sustainable, biomass, must meet certain criteria, such as: to possess a high capacity for regeneration, in a relatively short time; to offer a better efficiency compared with the traditional fossil fuel sources; to be less or non-polluting, to be used in solid, liquid and gaseous form; to have a broad applicability in production and consumption; to have a competitive level in terms of costs and prices for transport or storage, in both stages, as a raw material or as a finished product; to be a good substitute of traditional fuels (gasoline or diesel), without the necessity for structural changes of the of the engine. The article will conclude that the uprising trend of the EU biomass trade and consumption will continue, because of grown concerns of the EU Member States regarding the effects that greenhouse gas emissions have over the environment and over the quality of life standard, despite the critics which states that biomass production may have negative environmental effects, leading to massive deforestation and destruction of soil, water sources and natural habitat.

Keywords: sustainable development, international trade, environmental impact, biomass, biofuels

JEL Classification: Q 01, F 18

I. Introduction

If we take into account one of the simplest but self speaking theoretical construction of the classical school of economics, named *Crusoe Economics* (Rothbard 1998: 29), we learn that economical practices began as a result of natural labor division and exchange. From the very beginning, Crusoe's existence – which has landed on his island, standing face-to-face with nature – is simplified to his instinctive decision making process, necessary to satisfy basic life sustainable needs. In short, he must learn *what*, but mainly *how* to achieve a proper *mix of land and labor*, in order to bring his ends and purposes into effect. The picture changes when, in this idyllic society, another individual has landed. The newcomer, as well as the legendary hero, must mix his labor with land in order to survive. Naturally, the two lean to attain their ends with minimal effort, choosing firstly the simplest activities, but as they acquire technological knowledge the end products are becoming more complex, reaching the point where their production exceeds domestic consumption. Keeping in mind that their skills and interests differ, they have to shape their economic activities of production and exchange in accordance with David Ricardo's *Law of Comparative Advantage*. And this is how, as Rothbard points out, “the process of exchange enables man to ascend from primitive isolation to civilization” (Rothbard, 1998: 36).

This short story is important mainly because it argues that “economics has revealed a great truth about the natural law of human interaction: that not only is *production* essential to man's prosperity and survival, but so also is exchange” (Rothbard 1998: 35). Furthermore, such an analysis – of the interaction of two people in an uninhabited island, as abstract and simplistic as it is, makes sense when the spectrum of thought widens to the size and complexity of contemporary society.

Indeed, production, consumption and especially trade, under classical and neoclassical economic philosophy, have generated economic growth and social prosperity. But this type of development tickled a cost of environmental degradation, which over time, became big enough to jeopardize our wealth and even our existence. The interdependent relationship between economy and environment have been largely ignored by the neoclassical economists, where in their elegant economical growth theoretical constructions, the natural environment has not been included. However, since the early '70s, there were some vices that, through their rigorous studies, began to draw attention to this issue, many of them speaking even of an imminent environmental, economical and consequently a wellbeing crisis. A few years later these initiatives have echoed in the developed world, giving rise to a new paradigm which would link economics with the environment in a different kind of global development, under the name of *sustainable development*. Therefore, eco-efficiency and pollution control quickly became targets for technological research and development. Meanwhile, trade has adapted to change and – for example – a new international market of biomass and bio-fuels emerged and quickly expended.

Given this example, we propose, in this paper, to perform an analysis of international trade in biomass reported to the philosophy of sustainable development. In short, we want to give an answer to two questions: how much is biomass trade sustainable and what risks may arise if the main source of energy used today, based on fossil fuels, will be totally substitute by biomass? For doing this, the paper is organized as follows. The first section will briefly explore for *what* and for *who* is the concept of sustainable development addressing, in order to emphasize on the one hand the energy dependency of people and on the other hand, the need to change the global optics regarding the sources through which this energy is produced, optics that embraces the idea of substituting non-renewable resources with

renewable ones in the production process. The following section will focus on the biomass as an alternative to fossil fuels, on the trend in international trade of biomass – focusing mainly on European space – the purpose being to capture the dynamics of the demand for these products and last but not least, to draw the attention on the risks that we might face in the event that the traditional fuel consumption will be replaced exclusively by biomass.

II. Sustainable development and biomass

Although environmental issues were put on the carpet two centuries ago prefaced in the writings of the classical economist Thomas Robert Malthus, in his *Essay on the Principle of Population*, the main literature focused on the subject beginning with the decade seven of the last century, through a series of papers, reports and international conferences, which worth mentioning: the club of Rome report, entitled *Limits to Growth*, published in 1972 by Dennis L. Meadows *et. al.*; *Plan B* book series by Lester Brown, founder of the World Watch Institute (WWI) in 1974 and the Earth Policy Institute in 2001. The most important conferences gathered representatives from all over the world to discuss the problems with the environmental - economical and social relationships, took place in Stockholm (1972), Rio de Janeiro (1992), in Kyoto (1997) and in Johannesburg in 2002.

All these events have put into the light the environmental issues focusing firstly on the level of consumption of natural resources, in particular the imminent depletion of the non-renewable ones in the near future, secondly, on the problems with pollution control and adverse effects of human activities over environment and biodiversity, and thirdly, on the never-ending bad story of poverty.

The way ahead was outlined and defined in what is called sustainable development in the Brundtland Report entitled *Our Common Future*, published in 1987, when the new concept was defined as “the kind of development that meets the needs of the present without compromising the ability of future generation to meet their own needs” (Mihai, Borza 2009: 86). Sustainable development – thus became the common language of economists, ecologists, sociologists, philosophers and so on – has the task of finding a linkage between the environment and the society (who exploits it), to improve the degree of compliance between them, in order to be able to continue growth and development for us and for the ones who will replace those who live today.

II.1 Biomass resources

The influence of international trade over environment and welfare cannot be questioned, the causal links between these different aspects of life are intimate enough so that any issue caused by internal or external incentives in the market, finding – with little or no doubt – correspondent effect in the social and environmental side.

To be sustainable, biomass, which is considered alternative sources of energy, must meet certain criteria, such as: to possess a high capacity for regeneration, in a relatively short time; to offer a better efficiency compared with the traditional fossil fuel sources; to be less or non-polluting, to be used in solid, liquid and gaseous form; to have a broad applicability in production and consumption; to have a competitive level in terms of costs and prices for transport or storage, in both stages, as a raw material or as a finished product; to be a good substitute of traditional fuels (gasoline or diesel), without the necessity for structural changes of the of the engine, etc.

For these reasons, biomass resources appear, in a good extent, to provide a compromise between utility and eco-efficiency, having a real potential for sustainable energetic development.

The most important biomass energy sources are made of wood and wood waste, agricultural crops and agricultural byproducts from waste, waste derived from food processing and other plant and animal waste. Among these, the largest share in manufacturing biomass is wood and wood waste (64%), municipal solid waste (24%) and agricultural waste (5%) (Demirbas *et. al.* 2009: 1746).

In industrialized nations, biomass is mainly used as a source of fuel used directly or indirectly (through combinations in different percentages between traditional and bio-fuels). The most used biofuels are *ethanol* and *biodiesel*. The first is produced from several categories of biomass and used as a substitute for gasoline. It can be used 100% as a transport fuel or mixed with gasoline in different proportions. Used in blend, ethanol offers the advantage of significant reductions in petroleum consumption and in greenhouse gas emissions, due to high oxygen concentration.

The second one, biodiesel, can replace diesel in the same way that ethanol replaces (or blends with) gasoline, except that biodiesel can be used only if changes are made to the engine structure. The great advantage of biodiesel lies in the source of its production. It can be produced from rapeseed oil or coconut oil or even recycled cooking oil.

In the European Community, demand for biofuels is growing, and as such, international trade in these products are, for some time now, on an upward trend, described briefly in the following.

III. International trade with biomass

With the diversification of the economies and growing concern of nations in fighting and controlling the devastating effects of their gas emissions and in accordance with the gas emission targets under Kyoto Protocol, the use of biomass has become more than necessary. One important means of achieving this objective is to increase the rate of renewable sources in total of energy supply. Thus, the European Union proposed, in the Renewable Energy Directive, a minimum of 35% to reduce the gas emissions, in terms of the agricultural and forestry biomass, solid and liquid biofuels.

Growing demands in energy use and the increase of oil and coal prices have led to the development of new energy sources such as biomass energy, water energy, solar, wind and geothermal energy.

Table 1. Energy sources in total primary energy

Energy Sources	2008	%
Nuclear energy	241.763	28,7
Solid Fuels	177.348	21,0
Natural gas	168.116	19,9
Oil	107.351	12,7
Renewable Energy	148.134	17,6
which:		
biomass and waste	102.315	69,11
hydro electricity	28.147	9,0

wind energy	10.165	6,9
geothermal energy	5.778	3,9
solar energy	1.729	1,2

Source: Eurostat, data processed by Rusu Nicoleta at Apr 10, 2011

In 2008, approximately 18% of the European energy consumption came from renewable sources, where 70% from those came from traditional biomass production and 9% from hydro electricity. The new renewable energies (wind, geothermal, solar and biofuels) have a large and growing area. According to the European Commission, the biomass represents 4% from the EU energy needs. European Commission Action Plan sets out measures to increase biomass by creating incentives and removing barriers to market development, further promoting biofuels and finding new opportunities for the developing countries (European Commission).

Literature review reveals that Latin America, Sub Saharan Africa and Eastern Europe, North-East Asia and Oceania will be the most important biomass producers in the long term, while the main demand will be found in OECD countries and Asia South East, which means that one of the most important role trade will be played by biomass (Heinimo and Junginger 2009: 1311). As the demand for biomass products is increasing, and international sales market is in developing, these resources are unequal distributed in different parts of the world, the biomass trade is in a continuous growth among the European Union countries.

According to the European Commission reports, the EU is a net importer, in the present the rate of energy import dependency is 54%, and while in 2020 is expected to lead to an addiction rate of 70% if no measures will be taken to increase production of domestic energy. Although fossil fuels can't be replaced with renewable resources, it can be taken to combine them with those from renewable resources in order to obtain the desired effect, which is reducing the gas emissions (Magar, et al. 2010: 2).

The European Union is far from being the largest producer of biomass; it must then rely on imports, becoming a net importer. Thus, ethanol, vegetable oils, firewood, coal and wood pellets are the most important products which are currently the most traded energy purposes. They may be imported and used in their unprocessed shape or can be used as raw materials, in terms to be exported. In the mentioned period (Table no. 2.) reflects the rate of imports dependence of European Union, emphasizing it in 2008.

Table 2. International Trade biomass EU27, 2007-2008

	2007 TJ(GCV)	2008 TJ(GCV)
Primary production	4094966	4283722
Imports	211434	245111
Exports	93257	112631
Stock changes	-7567	-10511

Source: Eurostat - Energy balance sheets, 2007-2008 data processed at Apr 15, 2011 by Nicoleta Rusu

In 2008, primary production of biomass was 188 756 TJ higher than the previous year, this upward trend mainly thanks to the growing importance of biomass energy.

Although the European Union is a net importer of energy, biomass imports are relatively small. In 2008, imports of biomass were 2,4% of total primary supply, and according IEA, in 2009 they have raised to a level of 4,5% of total primary supply (International Energy Agency).

Because of insufficient production, member states dependent on imports of biomass, they use increasingly more often other EU member States or beside.

According to the European Commission report on the sustainability requirements for the use of biomass resources for electricity and gas, heating and cooling, increased trade is attributable to the form of pellets (a type of biomass, generally made from waste forestry industries) (European Commission).

Pellet production and consumption has increased in recent years, EU countries registered a high consumption, so a number of countries outside the EU produce wood pellets only for the European market. The biggest consumers of EU pellets were Sweden (1.8 million tons), Denmark, Holland, Belgium, Germany and Italy (all about one million tons), the main suppliers being Canada and the United States and Australia with a contribution of Argentina and South Africa. According to EAI reports, the European Union in 2009 imported pellets worth of 3,9 million tones, of which half were EU inside imports.

An overview of the biofuels trade shows that the largest global producers of ethanol are the U.S. and Brazil; the EU is a net importer. In 2009 estimated data shows that were traded 40 - 50 PJ of ethanol. Data on trade in ethanol are imprecise because of its multiple uses and lack of appropriate codes for biofuels in global trade statistics. In 2009, EU states have produced biodiesel of around 334 PJ (7,04 million tons), the main producers are Germany, France, Spain and Italy (International Energy Agency).

Production of biodiesel in the European Union represents two thirds of world production of biodiesel. According to the EAI report, biodiesel trade in 2009 totaled 80 PJ (1,60 million tons) from a one PJ in 2005.

Import dependence varies between Member States, this being due to uneven spread of renewable resources. Thus, the Netherlands, Denmark and Britain are major countries producing of biomass, being the only member states where the ratio of import/export is negative, this being due and rich endowment of renewable resources and their processing and refining capacity.

IV Barriers in international trade of biomass

Over the time the demand for biomass products has increased, which led to an intensification of international trade, development that was hampered by a number of barriers.

We define a "barrier in international trade in biomass" an issue that may directly or indirectly affect the development of the biomass trade to final consumers. Thus, although the use of these products on the environment is undeniable, there are many voices critical regarding the European Commission's position to achieve by 2020 a level of 10% use of biofuels. They support the idea to reduce the proportion up to 4% by 2015. Arguments supported by the members of the European Parliament where about the negative effects of biofuels over the cultivated areas, leading to massive deforestation, on soil, on water. Other critics have been on the effects of biomass would have it on food prices, increasing those.

Major obstacles to international trade of biomass can be referred to the tariff, especially affecting the ethanol trade, while logistical barriers have a greater impact on trade with

pellets. Technical barriers relate to physical and chemical descriptions of fuels, including biofuels, were introduced to ensure the safety and health of consumers.

To counteract the effects mentioned above, the main importing countries began to develop biomass national sustainability requirements for bioenergy, which led to the creation of some systems of certification (voluntary and mandatory) in agriculture, forestry and energy sectors (European Commission).

V. Conclusion

International trade of biomass produced by the European Union has intensified in recent years and this upward trend may continue in the future because of growing concern of the EU Member States regarding the sustainability and the effects that their greenhouse gas emissions have over the environment. Although there have been many critics over the sustainability of biomass products, their effects on the environment remain compelling. A step towards a wider application of biomass should be a more pronounced promotion policy of biofuels and the effects they have on our environment.

The EU Member States must intensify its efforts to increase investment in the renewable resources by supporting and encouraging the production of biomass and the adoption of policies that support production, utilization of renewable energy and providing incentives for biomass production and consumption at national and local levels.

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COMPARATIVE ANALYSIS BETWEEN THE OBJECTIVE AND THE SUBJECTIVE QUALITY OF LIFE APPROACH – STRENGTHS AND WEAKNESSES

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Quality of Life (QOL) can be defined as the degree in which the objective needs of an individual are satisfied in relation with the subjective perspective of his well-being. Thus, there are two different approaches in QOL evaluation: the objective approach (which analyzes the quality of life through economic indicators) and the subjective approach (which evaluates quality through the individual's opinion and actions). There isn't a widely accepted view referring to the use of one of those two QOL approaches, each having a series of strengths and weaknesses. This paper presents a comparative analysis of the advantages and disadvantages brought by these two approaches in QOL studies. The objective analysis has a series of strengths (among which we mention the fact that allows valide comparisons and the fact that doesn't depend on individuals perception), but has also a series of weaknesses, starting with the dependence on statistical data, which in many cases has incomplete registrations, and ending with the fact that doesn't reflect the real value of the well-being perceived by population. The motives for which the QOL subjective approach is promoted, therefore its strenghts, refer to the fact that it reflects important experiences for each individual and the fact that it reveals how macroeconomic policies satisfy the individual's needs. Certainly, this type of QOL analysis has also some weaknesses, like the lack of validity and accuracy in the data collected through surveys. Considering all the above, there is a conclusion with a wide aplication in the present context of the economy: we can't make a clear delineation between the two QOL approaches, moreover we can state the fact that the is a strong correlation between those two. Thus, the most precise systems of quality of life evaluation are those which use both objective, and subjective indicators, reaching a high level of aggregation at the national and international level.

Keywords: Quality of Life, Objective Approach, Subjective Approach, Strenghts, Weaknesses

Cod JEL: I31

1. Introduction

Quality of Life (QOL) can be defined as the degree in which the objective needs of an individual are satisfied in relation with the subjective perspective of his well-being. This concept has gained theoretical valences in the first part of the 20th century, when the society has realized the need for a concrete evaluation of the qualitative level that characterizes the standard of living of the population.

The starting point in the QOL development in the United States was represented by the fact that, although in full economic growth, the society was confronting with an increase in violence, criminality and public disorder. The economic growth was enough anymore in describing the quality of life, therefore in order to judge well-being of a nation had to use also social indicators. The source of QOL research is represented by the emergence of consciousness that economic growth doesn't necessarily bring wealth and happiness (Bălțătescu 2009).

In Romania, QOL studies appeared in the early '70, when our country was trying to delimit itself from the soviet political power, fact that favored the promotion of accidental concepts, such as the concern for well-being and quality of life (Mărginean 2004:19). These concepts were somehow promoted even by State institutions, in order to highlight the desire to by much closer to the Occident.

2. Literature Review

Given the nature more practical than theoretical of the quality of life, there are much more practical studies of the phenomenon. Thus, there are a number of authors who have focused on measuring quality of life at the national level, from whom we can mention Mark Rapley (2003), Kenneth D. Keith (2001), Ed Diener and Eunkook Suh (1997) or Jonathan Perry (1995). Equally in number or higher are the studies developed by several organizations acting in the social sector, such as OECD, UNESCO, WHO, Eurofound (European Foundation for the Improvement of Living and Working Conditions), ISQOLS (International Society for Quality-of-Life Studies). Some institutes have developed even their own system of QOL measurement: International Living (Quality of Life Index), Institute for Risk Research Canada (Life Quality Index), The Economist Intelligence Unit (Quality-of-Life Index), Mercer - Human Resource Consulting (Quality of Living survey).

These studies have highlighted the fact that the practice has developed such that the quality of life can not be approached anymore in theory as a whole, but rather separately, taking into consideration its factors of influence. Thus, there are two different approaches in QOL evaluation: the objective approach (which analyzes the quality of life through economic indicators) and the subjective approach (which evaluates quality through the individual's opinion and actions).

The need to make a differentiation in QOL approach is present even in the early '70 papers, when the specialists were preoccupied with the population's level of satisfaction regarding their living conditions (Stagner 1970: 59-68). However, a direct preoccupation with the objective/subjective duality can be found starting with the work of Siri Naess (1999) and Robert Cummins (2000), joined later by Joar Vittersø (2004) or Bernhard Christoph and Heinz-Herbert Noll (2003).

The subjective approach of analyzing the living standards has emerged as necessary variant due to the fact that the nations level of development was evaluated a long period of time almost exclusively through economic indicators. Consequently, even when the transition's effects were from the most painful ones, the economists insisted that the macroeconomic adjustments must be followed without any hesitation or remorse (Bălțătescu 2007: 26). Starting from the idea that the economic indicators reveal only a limited part of a nation's progress, the subjective indicators are more and more present in the scientific literature, but also in practical QOL studies.

Of course there are criticisms brought to both QOL approaches. Those specialists that critic the objective analysis argue that a simple evaluation of the national level of development using economic indicators doesn't present a detailed image of the quality of life perceived by population.

The counterargument of those who critic the subjective approach starts from the fact that evaluating QOL through the level of satisfaction is actually showing the measure in which the individual has adapted to the present living conditions (Stiglitz 2002: 25).

3. Comparative analysis between the objective and the subjective QOL approach

Considering the facts presented above, emerges the need to identify the strenghts and weaknesses of the two QOL approaches. Table no. 1 contains a detaliated presentation of those elements, the starting point being E. Diener and E. Suh paper „Measuring quality of life: Economic, social and subjective indicators” (1997), to which were added the elements identified in the most relevant QOL definitions.

Table no. 1. Strenghts and weaknesses for the two QOL approaches

	Strenghts	Weaknesses
O B J E C T I V E	a) Allows valid comparisons	a) Incomplete statistical registrations
	b) Full acceptance of the indicators sense or value from the society	b) Different ways of measurement and interpretation for a macroeconomic statistical indicator
	c) The characteristics can be measured with precision	c) Indicators with a negative connotation may have different interpretations in different countries
	d) Doesn't depend on people's perception	d) Compromise between two objective indicators e) Doesn't reflect the real value of the well-being perceived by population
S U B J E C T I V E	a) Reflects important experiences for each individual	a) The lack of validity and accuracy for the data collected with surveys
	b) Measurement indicators are more easily modifiable	b) The influence perceived depending on the macroeconomic predictions
	c) Reflects the degree in which individual's needs are satisfied by the macroeconomic policies	c) The variability (both between individuals, and for the same individual between different periods of time)

Made by author

The **strengths** of the *objective* approach refer to the following theoretical and practical aspects:

- because it uses international accepted indicators, *it allows valid comparisons* both from the geographic perspective (comparisons between regions, countries or continents), and from the temporal one (evaluating how the objective indicators have evolved from period to period reflects the level of development of a region, country or continent);
- the objectivity of the used indicators leads to a *full acceptance of their sense or value from the society*; having a clear delimitation between the indicators with a negative connotation (such as infant mortality rate) and the ones with a positive connotation (literacy, for example);
- in a objective QOL evaluation we use mostly quantitative indicators, fact that *offers precision to the measurement techniques*;
- maybe the most mentioned strength for the objective QOL analysis is the fact that doesn't depends on people's perception, therefore there is no subjectivity in evaluating quality of life.

In return, there are a series of **weaknesses** for the *objective* QOL evaluation:

- outlining a general index for QOL evaluation depends largely on the statistical registration made by each country, fact that can become an inconvenient because of the *incomplete statistical data* (there are countries in which the census doesn't have the same accuracy because of the impossibility to register some data, but also because of the people's reluctance to declare the real state of their life);
- although it's using international accepted indicators, the objective QOL evaluation is negatively influenced by the *different ways of measurement and interpretation for a macroeconomic statistical indicator* (for example, self-consumption and its influence on GDP);
- different cultures between countries can lead to *different interpretations for indicators with a negative connotation*, such as criminality, deforestations or gender equality;
- at the macroeconomic level, the policies adopted in order to improve the quality of life can sometimes lead to a series of *compromises between the objective indicators*; in order to obtain a certain level of economic development a series of recovery measures are taken, fact that in some cases means the scarifications of lower importance indicators; for example, in order to lower the infant mortality rate from 5/1000 to 1/1000 are necessary major investments in the medical system, investments that in many cases the government is redirecting to other domains with a higher importance for that period of time (Diener și Suh 1997: 196);
- the most important weakness for the objective evaluation refers to the fact that *it doesn't reflect the real value of the well-being perceived by population*, considering the fact that a economic developed society doesn't necessary mean a higher level of satisfaction for all individuals from that society (many personal or temporal factors can negatively influence the well-being of an individual).

The *subjective* approach on quality of life has also some **weakness**, such as:

- considering the fact that it represents an analysis at the individual's level, this approach *reflects important experiences for each individual*, fact that adds a plus to understanding the manner in which quality of life is perceived by each person;

- if a inadequacy is found in the subjective QOL measurement, *researchers can easily make rapid changes for the next studies*, trying to improve the instruments and adapt them to the data that is collected, thing that is not possible in a short period of time in the objective evaluation;
- through direct researches within the population, the subjective QOL evaluation *reflects the degree in which individual's needs are satisfied by the macroeconomic policies*.

As mentioned early, there are a series of criticisms brought to the **subjective** evaluation also, considering the following **weaknesses** that characterize this approach:

- the fact that this type of QOL evaluation uses interviews at the individual's level, we can register a *lack in validity and accuracy for the data collected*; most problems emerge from the fact that the subjective analysis uses surveys, this type of research being characterized, first of all, by a margin of error, and second, by a partial lack of information veracity;
- the subjective evaluation may be *influenced by the macroeconomic predictions*, considering the fact that the level of satisfaction is influenced by the optimism or pessimism that characterizes a person; the evaluation will have a better result if it's made in a economic context that is compared with the previous one that was less favorable; however, if the national policy concentrates on the present problems within the society, the comparison item for the individual also change, leading in most cases to a poorer QOL evaluation (Diener and Suh 1997: 196);
- evaluation quality of life only in a subjective manner can not lead to pertinent comparison within the society, considering the fact that such an evaluation is characterized by a *higher level of variability* (both between individuals, and for the same individual between different periods of time); each individual perceives in a different manner the events around him, giving them a greater or lesser importance depending on his expectations and needs; moreover, for the same person, the evaluation can vary from a period of time to another, depending on the modifications occurred in his life, fact that changes to some extent his priorities.

Considering all the strengths and weaknesses presented so far, the experience of the developed countries demonstrates the necessity of a higher coordination between the economic components and the social ones. We can not obtain spectacular results in economy as long as the social sector doesn't receive the proper attention.

Thus, in the scientific literature there are more and more frequent the research models that evaluate quality of life both in an objective and a subjective approach. Among the first authors to highlight such a model is Wolfgang Zapf (1984), who presents in his book "Living Conditions and the Perceived Quality of Life: Individual Well-being" a model that is based on the duality objective/subjective, leading to a more appropriate classification of the QOL level for the individual within the society.

4. Conclusions

As can be seen from the comparison of the objective and subjective QOL approach, we can not make a clear delimitation between these two; moreover we can state the fact that these approaches are interrelated. In this respect, E. Diner and E. Suh (1997) highlighted that a thorough understanding of the subjective QOL requires the understanding how the objective conditions influence the individual's evaluation of his living conditions.

A pertinent analysis for the quality of life takes into consideration both aspects: the macroeconomic analysis and the individual's evaluation. The starting point is the identification of the objective elements that describe the current level of the economic and social development of a nation, fact that represents the ground for the development of a social policy that promotes QOL improvement. The second stage is a subjective analysis for the quality of life, the focus being on the standard of living and individual's well-being, on how he adapted to the living conditions offered by the society.

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SOCIAL AND ECONOMIC IMPACTS OF WIND POWER IN CORELATION WITH THE FINANCIAL CRISES

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Given the present day and age we live in, it is vital that the world considers the various natural resources available to us and how to best make use of them. Furthermore, it is imperative nowadays to look at the many environmentally friendly energy sources which will reduce the ill effects of global warming and provide a host of economic and social benefits too. One such beneficial resource is wind and the consequent conversion of wind energy into electricity. In fact, the advantages of wind energy are so immense that even the government has begun promoting it. Since generating electricity from wind doesn't emit any green house gases or produce any particulate emissions, it massively reduces the rate of global climate change, and at the same time doesn't contaminate our water resources such as lakes and reservoirs.

Wind energy provides security and stability in the national consumer energy market. By reducing a nation's dependency on foreign fossil fuels, such as coal and natural gas, spikes in fossil fuel costs or other supply disruptions will not have as much of an adverse impact on the national economy. Also the price of wind energy is relatively stable because there are no fuel costs, which is a major operating expense for most coal and gas fired electric generation facilities. Although wind farms occupy large swaths of land, wind turbine towers themselves take up less space, only a few meters at their base. This leaves space to utilize the land around the turbine tower for several other purposes, such as ranching or agriculture.

The application of advanced technologies has succeeded in making the conversion of wind energy much more resourceful and well-organized. Furthermore, wind is a proven clean, free and renewable form of energy that preserves our natural resources.

Wind energy conserves water resources as wind farms virtually require no cooling, as opposed to natural gas, coal and nuclear power plants that require a tremendous amount of water for cooling. In fact, electricity generation is the leading contributor to water withdrawals from our nation's water reservoirs.

Since wind turbines come in an array of different sizes, they are a great resource to generate energy in remote locations to support varying population levels.

The use of wind energy reduces Greenhouse Gas emissions, and increases security and stability by diversifying the national electricity portfolio.

Apart from environmental profits, there are many social and economic advantages too in promoting wind energy. One of these is that the promotion of wind energy assists in revitalizing rural economies, thereby creating jobs at the ground level, such as assembly workers, surveyors, engineers, lawyers, bankers, technicians, to name just a few. In doing so, it also benefits local communities, mainly in the form of property tax revenues and new types of income for landowners through land lease payments.

Keywords : wind energy, alternative source, ecological advantages

1. Wind energy, environmental impact

Wind energy is considered a green power technology because it has only minor impacts on the environment. Wind energy plants produce no air pollutants or greenhouse gases. However, any means of energy production impacts the environment in some way, and wind energy is no different.

Aesthetics and Visual Impacts – Elements that influence visual impacts include the spacing, design, and uniformity of the turbines.

Birds and Other Living Resources – Preconstruction surveys can indicate whether birds or other living resources are likely to be affected by wind turbines.

Global Warming – Wind energy can help fight global warming. Wind turbines produce no air emissions or greenhouse gases.

Lightning – Ongoing research and increased operator experience are improving the understanding of lightning and wind turbines.

Noise – Like all mechanical systems, wind turbines produce some noise when they operate. In recent years, engineers have made design changes to reduce the noise from wind turbines.

TV / Radio Interference – In the past, older turbines with metal blades caused television interference in areas near the turbine. Interference from modern turbines is unlikely because many components formerly made of metal are now made from composites.

2. Why Wind Energy?

Wind turbines of all sizes have become a familiar sight around the world for a wide variety of reasons, including their economic, environmental, and social benefits. The potential for wind energy is immense, and experts suggest wind power can supply up to 20% of U.S. and world electricity. Nevertheless, the United States currently produces less than 1% of our electricity from wind. The advantages and disadvantages of wind energy are detailed here to help you decide what the future of wind should be in the United States.

Economic Advantages

a) **Revitalizes Rural Economies:** Wind energy can diversify the economies of rural communities, adding to the tax base and providing new types of income. Wind turbines can add a new source of property taxes in rural areas that otherwise have a hard time attracting new industry. Each 100 MW of wind development in southwest Minnesota has generated about \$1 million per year in property tax revenue and about \$250,000 per year in direct lease payments to landowners.

b) **Fewer subsidies:** All energy systems are subsidized, and wind is no exception. However, wind receives considerably less than other forms of energy. According to *Renewable Energy World* magazine, conventional energy receives US\$300 billion in subsidies per year, while renewable energy has received less than US\$20 billion of tax-payers money in the last 30 years.

c) **Free Fuel:** Unlike other forms of electrical generation where fuel is shipped to a processing plant, wind energy generates electricity at the source of fuel. Wind is a native fuel that does not need to be mined or transported, taking two expensive aspects out of long-term energy costs.

- d) **Price Stability:** The price of electricity from fossil fuels and nuclear power can fluctuate greatly due to highly variable mining and transportation costs. Wind can help buffer these costs because the price of fuel is fixed and free.
- e) **Promotes Cost-Effective Energy Production:** The cost of wind-generated electricity has fallen and today is depending on wind speed and project size.
- f) **Creates Jobs:** Wind energy projects create new short and long term jobs. Related employment ranges from meteorologists and surveyors to structural engineers, assembly workers, lawyers, bankers, and technicians. Wind energy creates 30% more jobs than a coal plant and 66% more than a nuclear power plant per unit of energy generated.

Social Advantages

- a) **National Security/Energy Independence:** Wind turbines diversify our energy portfolio and reduce our dependence on foreign fossil fuel. Wind energy is homegrown electricity, and can help control spikes in fossil fuel cost. Distributed generation facilities, like many community wind projects, provide a safeguard against potential terrorist threats to power plants.
- b) **Supports Agriculture:** It is not often a new crop emerges from thin air. Wind turbines can be installed amid cropland without interfering with people, livestock, or production.
- c) **Local Ownership:** A significant contribution to the worldwide energy mix can be made by small clusters of turbines or even single turbines, operated by local landowners and small businesses. Developing local sources of electricity means we import less fuel from other states, regions, and nations. It also means our energy dollars are plowed back into the local economy.

Environmental Advantages

- a) **Clean Water:** Turbines produce no particulate emissions that contribute to mercury contamination in our lakes and streams. Wind energy also conserves water resources. For example, producing the same amount of electricity can take about 600 times more water with nuclear power than wind, and about 500 times more water with coal than wind.
- b) **Clean Air:** Other sources of electricity produce harmful particulate emissions which contribute to global climate change and acid rain. Wind energy is pollution free.
- c) **Mining & Transportation:** Harvesting the wind preserves our resources because there no need for destructive resource mining or fuel transportation to a processing facility.
- d) **Land Preservation:** Wind farms are spaced over a large geographic area, but their actual "footprint" covers only a small portion of the land resulting in a minimum impact on crop production or livestock grazing. Large buildings cannot be built near the turbine, thus wind farms preserve open space.

3. Disadvantages

- a) **A Variable Resource:** Turbines produce electricity only when the wind blows. This variability is monitored and compensated in the same way utilities monitor demand changes each day, so there are not any actual changes in power supply for the end users.
- b) **Aesthetics:** People have widely varied reactions to seeing wind turbines on the landscape. Some people see graceful symbols of economic development and environmental progress or sleek icons of modern technology. Others might see industrial encroachment in natural and rural landscapes. There are many ways to minimize the visual impact of wind turbines,

including painting them a neutral color, arraying them in a visually pleasing manner, and designing each turbine uniformly.

c) Shadow Flicker: Shadow flicker occurs when the blades of the rotor cast a shadow. Research has shown the worst-case conditions would affect, by way of light alteration, neighboring residents a total of 100 minutes per year, and only 20 minutes per year under normal circumstances.

d) Noise: Wind turbines are not silent. The sounds they produce are typically foreign to the rural settings where wind turbines are most often used, but as turbine technology has improved over the years, the amount of noise has fallen considerably. The sounds of wind turbines do not interfere with normal activities, such as quietly talking to one's neighbor.

e) Biological Resource Impacts: As with any construction project or large structure, wind energy can impact plants and animals, depending on the sensitivity of the area. Direct fatalities from collisions or electrocutions and loss of wildlife habitat and natural vegetation are the primary wildlife concerns associated with wind energy. Extensive environmental impact analysis are integral of project development to mitigate impacts as much as possible.

f) Construction: Wind systems can involve the transportation of large and heavy equipment. This can cause a large temporarily disturbed area near the turbines. Erosion is another potential environmental problem that can stem from construction projects. The single most reliable technique for limiting erosion is to avoid grading roads and to perform site reclamation post construction.

g) Radar: Radar interference by wind turbines is rare and easily avoided through technological improvements and proper siting of turbines that are close to sensitive areas. A number of U.S. government installations have both wind turbines and functional radar, and the British military has a track record of successfully addressing these challenges.

4. Impact of Financial Crisis on Wind Energy Installations Globally

Global Wind Energy Market Analysis and Forecasts to 2020 report gives details historical and current statistics relating to wind energy installed capacities and their growth scenarios until the year 2020. It also provides an analysis of the historical and forecast growth of installed capacity, and the market structure and regulatory policies that govern the world's key wind power countries. The report further includes information relating to the important cost, technological, market, and research and development trends on a global basis. It also analyzes the wind power deals that have taken place over the years and gives detailed profiles of the top five market players for each of the sub-sectors in the global wind energy industry. The report facilitates market analysis and forecasting of future wind energy industry trends. It helps identifying growth segments and opportunities in the energy industry. The news and deals portfolio provided in the report helps an investor to gauge the global wind energy market and accordingly direct their investment. Of the available renewable energy sources, wind is the most established commercial generating technology with highly effective and reliable equipment and machinery. It has observed tremendous growth, with the total installed capacity augmenting from 23,900 MW in 2001 to over 121,013 MW in 2008, reflecting an annual growth rate of 26% for the 2001 - 2008 period.

Annual Wind Energy Installations to be impacted by the Financial Crisis. The current financial crisis is severely affecting the growth of wind energy globally. The global wind energy industry is witnessing many cancellations of turbine orders, freezing up and sale of

wind farms, and difficulties in securing financial aid for new projects. The worldwide annual wind energy installations will trickle down by more than 15% in the years 2009 and 2010, as against the growth rate of 35% in the new installed capacity of 2008, according to the report. This will further result in a dip in the demand for wind turbines. Increasing Mergers and Acquisitions to be the Outcome of Financial Crisis Wind farms are capital-heavy projects with significant up-front investment that can be financed only by large utilities and investment groups. The critical short-term challenge faced by most wind power developers is financing, particularly for under development projects. The economic downturn, resulting in the failure of some of the world's largest investment banks, has led to an increase in the cost of capital for wind energy projects. Against this backdrop, only a few large wind power companies will be in a position to pursue their project development plans. Shortage of financial resources with smaller players would give an opportunity to the big giants to takeover or form alliances with such companies, thereby increasing the level of consolidation in the wind energy industry.

Declining Share of Europe in By Region Break-up of Wind Energy Capacity

Though Europe is the leading region in terms of the current global cumulative wind energy installed capacity its share in the world's wind energy industry has dropped from over 73% in 2001 to 61% in 2007 and 54% in 2008. Also, the faster rate of wind energy growth in the US, China, India and Canada is increasing the share of the North American and Asia-Pacific regions in the global wind energy industry.

5. Wind Energy Today and Tomorrow

In just a few short decades wind energy has matured dramatically, making wind one of the fastest growing sources of electricity in the world today. Due to technological advancements, policy initiatives, and economic drivers, wind energy is now able to make a cost-competitive contribution to our growing energy needs. Wind Turbine Technology Turbines today are sleek and slender machines, a far cry from their bucolic wooden ancestors. Around the world, wind turbines of all sizes have become a familiar sight; ranging from home or farm-scale machines of 1 kilowatt, all the way up to arrays of large 3 megawatt machines. Modern wind turbines are up to the task of producing serious amounts of electricity. A popular sized machine in the U.S. today is a state-of-the-art 2 MW turbine that stands as tall as a 30-story building and costs roughly \$3.5 million installed. With a good wind resource, this size turbine can produce 6 million kWh of electricity each year, or enough energy to run 600 average. american households.

Wind Energy Around the Globe

Turbines are sprouting up around the globe in record numbers. By the end of 2007, there were nearly 94,000 MW of wind installed around the world, which is a significant rise from the 59,000 MW installed in 2005. The pace of growth is now greatest in the United States, where installed wind energy capacity grew by 45% in 2007. This growth makes the US the leading nation in new capacity installed for wind energy. Yet Germany continues to have the highest total wind capacity of any country with 22.3 GW. The U.S. is right behind them with 16.8 GW of total installed capacity and it is expected that the U.S. will overtake Germany as the leader in installed wind capacity. The recent boom in renewable energy investment, including wind energy generation, is being aided through progressive policies and widespread public support.

In summary

The advancement of large-scale wind turbines has created energy that in some cases is cheap enough to compete with traditional electricity. Still in its early stages, wind power technology has the potential to greatly impact the economy, steering the United States and Europe from dependency on foreign oil to diversified energy sources. Wind power, no longer considered an alternative fuel, has found its way into the mainstream in certain regions of the country. As energy prices continue to rise and the world becomes increasingly aware of greenhouse gasses, wind power's popularity has grown.

The generation of wind power is directly proportionate to the amount of wind that exists in the environment, not demand. This is a major factor that prevents wind power from becoming the prevailing form of energy used in Europe and elsewhere.

You might think that since wind is a free resource, wind energy should be free or inexpensive. However, the infrastructure required to harness and transmit this energy carries a cost that is passed down to consumers. The popularity of wind turbines has risen, with celebrities such as Jay Leno adding smaller ones to building roofs. But these smaller devices are a long way from providing a viable amount of energy.

Technological advancements and supportive policy measures have the ability to drastically increase the future of wind energy development in our nation and our world. Wind power has the unique ability to provide even greater sources of distributed energy production, which means less risk and a stronger energy portfolio. America's ingenuity and drive for independence are well suited to increased wind energy development in the future. Stay tuned to advancements at industry and policy levels as wind energy continues to grow. For the sake of national security, rural economic revitalization, and resource preservation we must promote a renewable energy economy. Wind power can be a cornerstone of that sustainable energy future because it is affordable, provides jobs, substantial and distributed revenue, and treads lightly on our environment without causing pollution, generating hazardous wastes, or depleting natural resources. Embracing wind energy today will lay the foundation for a healthy society.

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MAIN THREATS TO THE ROMANIAN LABOUR MARKET IN THE CURRENT CONTEXT

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The paper's topic is focused on the Romanian labour market prospects, which is going to be affected by two main threats: aging and population decline. These two factors are supposed to dramatically change Romania's economic structure. It is therefore necessary to know how they will evolve in the next decades, facts which represent the main objective of our article.

These topics are debated at large scale at the European and national level, because they describe a process which implies European Union as a whole.

The methodology used in order to quantify this phenomenon includes statistical methods (correlation analysis and descriptive statistics). We have used data available at national and European level in order to build a proper argumentation.

The results obtained are worrying because there is a high risk to assist at an accelerated aging of the Romanian people, doubled by a very low birth rate. This might create huge problems in the economic and social system due to productivity decrease and the pressures on the pension's funds.

The paper offers scientific arguments for developing macroeconomic policies in order to prevent the negative situation in which we could be within less than 40 years. As a comparison term we brought into attention the Germany situation, country which offers economic equilibrium to the EU, but is also affected by aging.

The manner in which this problem has been approached is an original one because we tried to put Romania's situation into the context of the European Union general situation, the threat being emphasised by the fact that it is going to be a trend for the whole continent.

Actually, if it is not taken adequate measures, we will be confronted with a demographic crisis, much worse than the current financial one, because the effort of the country to reverse a birth rate decreasing trend with an aged population will take decades.

Key words: *aging, labour market, employment structure, sustainable development*

JEL classification: *J11, J21, O16*

I. Introduction

Sustainable development is one of the fundamental objectives laid down by the European Union constitution treaty. The concept of sustainable development refers to meeting the needs of present generations without compromising the opportunities of future generations to meet its own needs.

Given the importance of this objective in 2001 the European Union launched its first Sustainable Development Strategy (SDS), adopted by the European Council in Gothenburg.

In the common vision of the Member States, which can be found in the revised SDS (June 2006), sustainable development implies the need to ensure the preservation of land capacity to support life in all its diversity based on principles such as: democracy, gender equality, solidarity, rule of law and respect of fundamental rights, freedom and equal opportunities for all. The expected result is continuous improvement of welfare and quality of life for present and future generations by promoting a dynamic economy characterized by full employment, high levels of public education and health, social and territorial cohesion, and environmental protection.

In 2010, with the launch of Europe 2020, the priority to ensure sustainable economic growth was reiterated. This became one of the three fundamental objectives of the European Union for the next decade, with smart and inclusive growth. In response to financial crisis and the challenges of globalization, the growing pressure on resources and aging populations, the European Commission established a series of targets in order to achieve economic growth.

The targets established and the initiatives undertaken are strongly correlated. Thus, education, training and lifelong learning will equip the workforce with skills and qualifications needed in order to fulfil the jobs requirements. This will lead to increasing employment rates, incomes and living standards, contributing to poverty reduction.

A better level of education will increase innovation and research capacity of the economy, including developing green technologies. They will help to combat climate change and to boost competitiveness and the number of jobs in environmental protection field (COM, 2010).

In this context, human resource plays a dual role: it is one of the strengths of the European Union (manifested by the talent and creativity of individuals), but also a threat (by negative demographic trend, the aging population and the reduction of the compatibility between qualifications held by the labour force and those required in the current economic labour market).

II. Demographic factors and their impact on sustainable growth

In 2008, EUROSTAT has released the forecasts related to the population growth trend until 2060 (EUROPOP2008, convergence scenario) for all the 27 Member States, including Norway and Switzerland, which have been used by the European Commission in order to analyse demographic aging impact on public expenditures.

The results of these projections bring into attention the powerful negative impact exerted on long term by the population aging on the public finances (pensions, health insurances and long term care), employment, productivity, economic growth and other areas. Life expectancy is supposed to rise, and the “baby boom” generation is going to decrease.

Thus, in 2008, at the level of the 27 Member States, the **total population** counted 495.4 million people, increased by 2% compared to 2000. EUROSTAT forecasts indicate that in 2035 it is going to be recorded the largest number of EU population (520.7 million), but this will gradually decrease until 1st January 2060 at 505.7 million, but it will maintain over the level recorded in 2010 (Fig. no. 1).

Regarding Romania, the decreasing trend of the last years is going to be maintained for the next period. If in 2008 the population numbered was 21.5 million people, falling by 4.4% compared with 2000, in 2060 this is estimated to reach 16.9 million, with almost 20% lower than the number recorded in 2008 (Fig. no. 1).

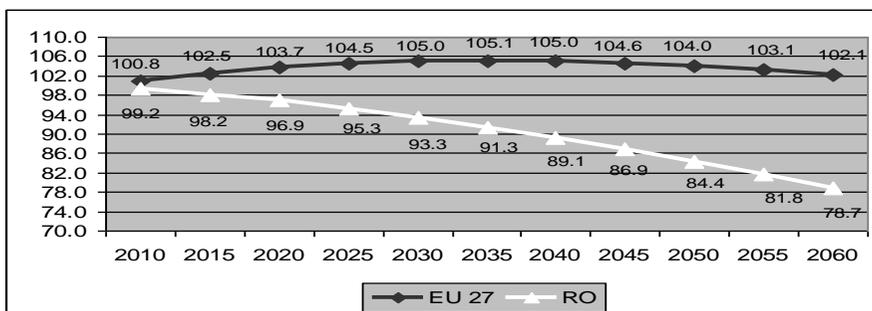


Fig. no. 1 Population projection at 1st January of each year (2008=100)
 Source: EUROSTAT, EUROPOP2008, Convergence scenario

These projections are considered by many Romanian authors too pessimistic. Thus, Lazea (2009) and Bari (2010) put in discussion the forecast number of 157.9 thousand annual births, considering that an average of 210.8 thousand is more realistic.

This has been computed starting from the same average fertility rate of 1.32 births per women, projected by the EUROSTAT study, but considering that 1.1% women from the population of the period 2008-2060 will give birth (1.1% has been also the share of the women from the total population who gave birth during 1990-2005).

According to these hypotheses, in 2060 the Romania's population could reach a number of 19.7 million persons, by 17% larger than EUROSTAT projection (Fig. no. 2).

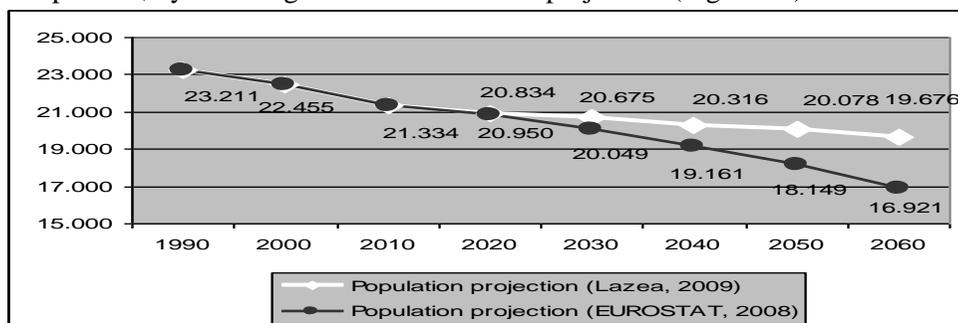


Fig. no. 2 Population projection in EUROSTAT studies (2008) and Lazea (2009)

Even if the hypothesis of a population of 16.7 millions inhabitants in 2060 will not be realised, being one of the most pessimistic, Romania is going to be affected by a strong **aging process**.

First of all, this phenomenon is sustained by the *population age structure*, characterised by the increase of the elderly (over 65 years) and the decrease of young people share (under 15 years) in the total population number (Fig. no. 3).

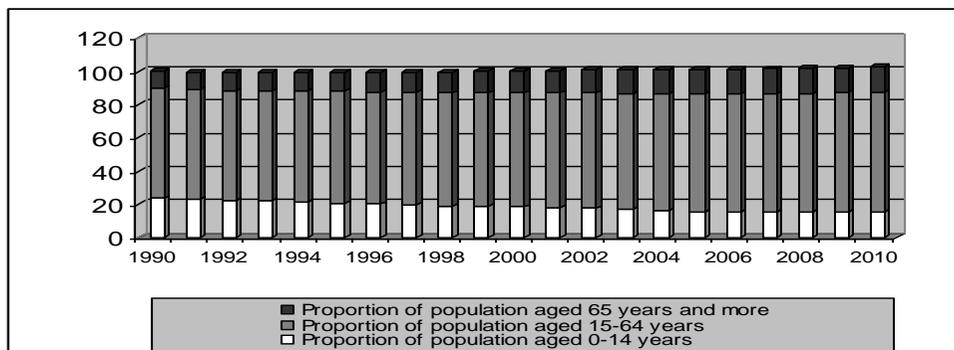


Fig. no. 3 Population age structure (1990-2010)

Source: EUROSTAT, NavTree_en. pdf, Population on 1 January: Structure indicators

This situation can be also emphasized if we analyse *old dependency ratio*, which has progressively increased in the last 20 years, becoming almost equal to the youth dependency ratio that has continuously decreased (Fig. no. 4).

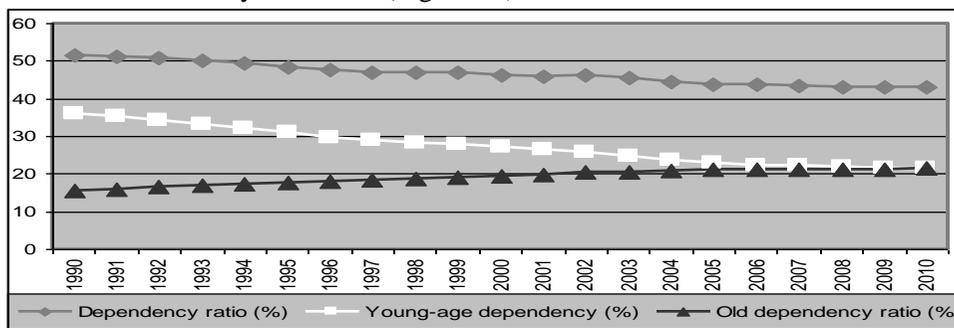


Fig. no. 4 Dependency ratio, young-age dependency and old dependency ratio in Romania (1990-2010)

Source: EUROSTAT, NavTree_en. pdf, Population on 1 January: Structure indicators

The number of elderly at EU level is expected to increase from 84.6 million in 2008 to 151.5 millions in 2060, actually from 17.1% to 30% of the total population number. In these conditions the old-age dependency ratio (population 65 and over to population 15 to 64 years) is going to increase from 25.4% in 2008 to 53.5% in 2060 (Fig. no. 5).

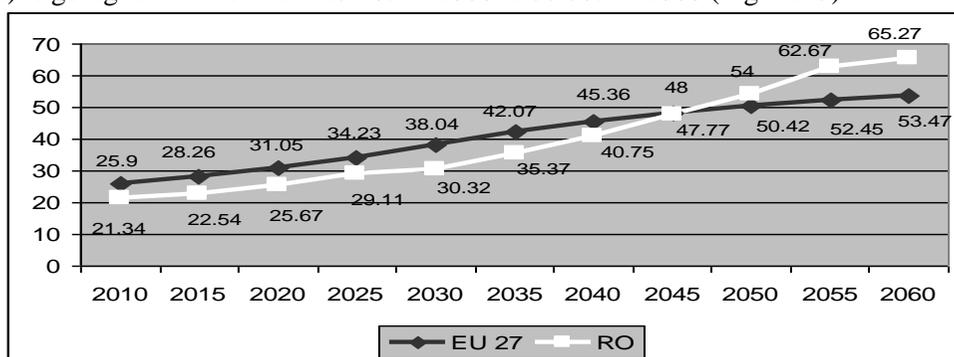


Fig. no. 5 Projected old-age dependency ratio EU – 27 and Romania (2010-2060)

Source: EUROSTAT, EUROPOP2008, Convergence scenario

Regarding Romania, the old-age dependency ratio is going to record an accelerated growth, being estimated to overstep the EU average in 2045 and reach a value of 65.27% in 2060 (Fig. no. 5).

Even if according to the papers released by the above mentioned Romanian authors it is sustained the fact that this indicator will not reach the level of 65.27% in 2060, more reliable being a lower percentage (almost 53.37%), this represents an increase by 150% compared to the value recorded in 2010.

In these conditions it is expected that the economic effects of the projected demographic evolutions to be very strong, and a long term sustainable development to be not so sure. The main cause is represented by the decrease of the population number capable to work and, consequently of the activity rate, this fact having a direct effect on reducing the output and slowing down the economic growth process.

III. Demographic aging and structural changes in economy

One of the direct effects of demographic aging on the economic activity will be changing the structure of demand for goods and services fact which is going to have a significant influence on this market, but also on labour and capital markets (Börsch-Supan 2003).

Thus, the demand for goods and services special designed for old people it is going to raise. In 2060 a smaller number of the work force will have to produce more in order to assure at least the actual level of consume and the capital will be mainly allocated to the countries where the population is younger and the earning rates could be higher.

In the case of Germany, the above mentioned authors have synthesised the effects of demographic aging according to the next forecasts:

- In 2035 the workforce will have to be by 15% more productive in order to obtain the gross domestic product per capita that could have been realised if the demographic aging had not been recorded;
- Only half of this increase in productivity could be achieved by increasing the efficiency of capital use, taking account of the human capital deterioration that comes up with demographic aging;
- Many of the jobs will be subject to a process of economic restructuring, the result of changes in the structure of demand for goods and services.

In this respect, in the paper entitled *Aging and Structural Change* (ThieBen, 2007) using a regression function with panel data the author analyses the impact of aging on the structure of the economy.

Analysed data support the idea according to which aging will accelerate the relative decline of some sectors such as agriculture and mining, the increase of the financial sector, real estate and social services, and also will slow down the decline of manufacturing industry.

The most interesting result of the research is the fact that aging will sustain the increase of the sectors with quite low productivity that will affect on long term the economic growth process.

For Romania, the situation is much more difficult. Thus, a simple analysis proves the fact that in 2060, in order to maintain the same standard of living recorded in 2009 (GDP/capita of 2607 USD) for the 19676.4 thousand persons that will represent the population of

Romania, the productivity of the 11083.4 thousand persons at the working age should be by 28% higher (this in order to obtain the production realised by the 15478 thousand persons at the working age in 2009).

But, if we intend to reach the level of the developed countries, the productivity should rise more than that.

According to the data offered by the World Bank for 1990-2008 period, it seems that for Romania the link between the proportion of elderly and the proportion of people employed in agriculture has an reverted U shape. If until 2001, the two indicators had recorded the same direction of evolution, it seems that, after this year aging determined a decrease in employment in agriculture (Fig. no. 6).

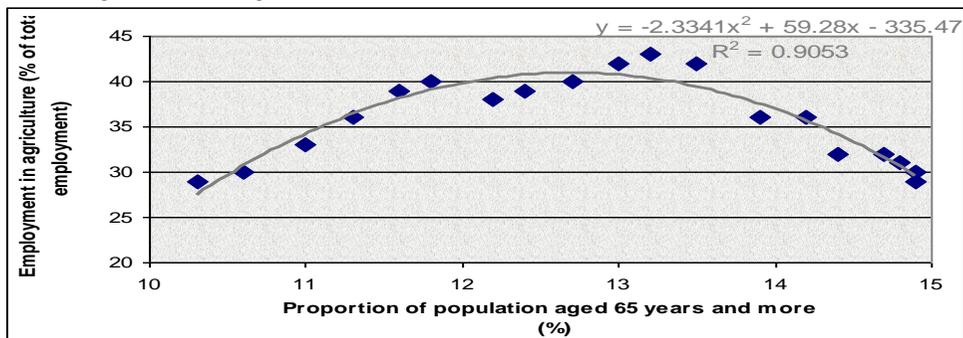


Fig. no 6 Correlation between demographic aging and employment in agriculture
Source: Own processing according to the World Bank data

A more stable relation can be seen between the population employed in industry and the indicator that quantifies the process of aging. Thus, a long period of time, aging has conducted to the decrease of employment in industry, but for the moment this relation tends to change (Fig. no. 7).

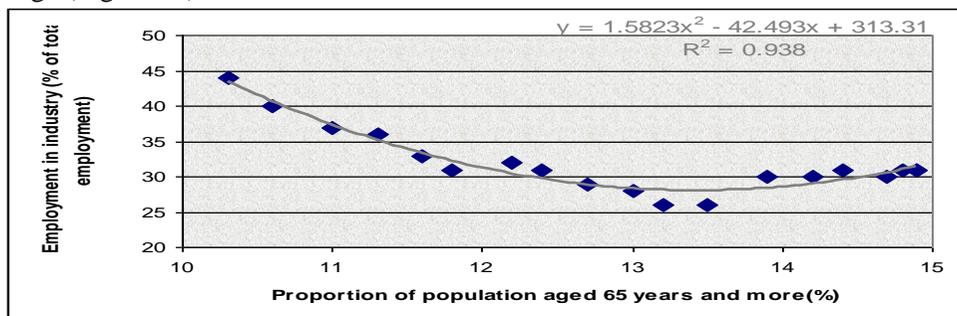


Fig. no 7 Correlation between demographic aging and employment in industry
Source: Own processing according to the World Bank data

Regarding the tertiary sector, as in Germany, the correlation between the two indicators proves the existence of a direct, very strong relation. Thus, with the acceleration of aging, as expected, employment in services has recorded an increasing trend (Fig. no. 8).

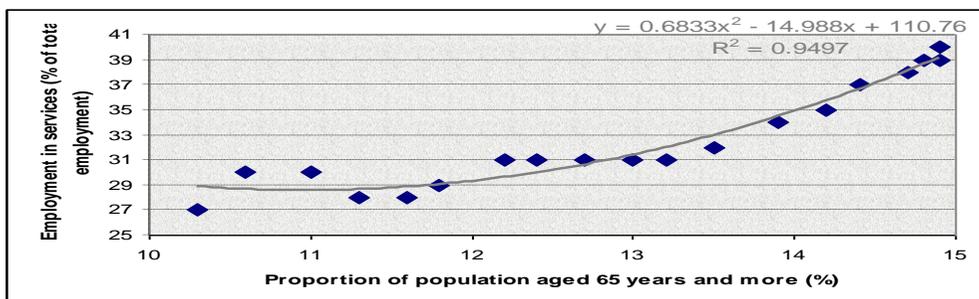


Fig. no. 8 Correlation between demographic aging and employment in services
Source: Own processing according to the World Bank data

IV. Conclusions

According to data presented above, in the coming decades internal growth potential of Romania will be affected not only by the consequences of the financial crisis that our country is passing through, but also by a negative demographic process.

First, this will reduce the size of one of the main factors of production – labour force and will determine its deterioration due to population aging. In the absence of significant increase in labour productivity the economic effects of negative demographic trends will be felt through a slowdown in the process of economic growth. The main reason is the decrease in the working age population and therefore in the rate of activity, which will have a direct effect of reducing production.

Due to the aging process the structure of economic activity is expected to change, by increasing the share of tertiary sector, i.e. services for older people and with this the structure of employment.

In addition, external challenges manifested by increased competition in international markets will force our country to quickly change the economic structure and the system of education in order to be able to adopt technological changes necessary for a sustainable economic growth.

Acknowledgments

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CREATIVE POTENTIAL OF RESEARCH AND DEVELOPMENT - A COMPOSITE INDEX OF POTENTIAL SCIENTIFIC CREATIVITY

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Both Lisbon Council in March 2000 and the one in Barcelona in 2002 represent major turning points in science and research activities at European level. At that time there was a formal recognition that science, technology and innovation, coupled with a quality education is the key to development and long-term competitiveness of European space. Moreover, the decade 2000-2010 was declared as a dedicated to the investment in these sectors, and 2009 was named Year of Creativity and Innovation at European level. In a study in the EU States and candidate countries, whose results were published in 2010, it was noted however that, despite the special attention given lately to these issues, index fund allocations for research and development budgets national level of 2007 is 0.67% on average in the EU (27 countries), compared with Japan (0.68%), South Korea (0.80%) and especially the United States (1.03 %).

The purpose of this paper is to identify those factors that influence a nation's potential of scientific creativity and to find a way to compare different countries in terms of such potential. If until now many attempts were made to create an index of national or regional creativity, our goal is to narrow the field of creativity to scientific research and to compare the performance / potential of Romania compared to other European Union countries. Among the basic elements which have a direct impact on the potential for innovative scientific development, one can identify investment, human resources and current performance. Based on the above factors, a composite index of scientific creativity potential was developed, which takes into account the three main elements described above: human capital (human resources in science and technology and researchers), financial capital (investment in research and development) and scientific performance (Hirsch Index). Data for the first two were extracted from the Eurostat database for comparisons to be made between countries, while the third one has been estimated by specialized research teams based on data available on Essential Science Indicators (ESI) of Web of Knowledge. The main limit is the level of accuracy in data provided by each nation, and the extent to which such data were estimated, not final. The main benefit is that of identifying the position one country compared to others, but also to find the main factors that placed that country at one level or another in the overall classifications, thus allowing for the development of action plans particularly focused on those elements.

Keywords: research and development, human resources, creative potential, investment in research and development

JEL Codes: O15, O31, O32

1. Introduction

Although basic research has traditionally registered relatively late economic effects, there are many areas of applied research where they are recorded much faster. This is demonstrated by the growth in importance that research and development departments of several private companies are gaining in several sectors: IT, pharmaceutical, automobile, etc. Many results of these departments are applied in production and the increasing global competition (see the IT sector) makes that the time distance between these results of a research process and their implementation is increasingly lower. Our theory is that research and development is part of the creative economy and represents, perhaps, even though apparently without immediate and direct results, one of the main engines of global growth. The purpose of this paper is to define the main factors that impact on the country's scientific creativity and to compare, using a composite index, the creative potential of countries belonging to the European Union.

2. Consecrated indexes in the estimation of creative potential

One of the most popular theories of economic growth has been developed by Richard Florida (2002), and is based on defining the creative capital as an engine for development. In order to quantify the economic development potential of a city or a region he identified and defined three parameters, which he called the three T: Technology, Talent (skills) and tolerance (Florida, 2002). While his study in 2002 was concentrated on the United States, in the book "The Flight of the Creative Class" (Florida, 2007) he added a part dedicated to an international study. Data used for the study were provided by the WTO, UNESCO, World Bank and Ronald Inglehart's study for the period 1995-1998 in terms of tolerance. Moreover, it also calculates the Global Creativity Index (GCI). Its formula was determined by Tinagli and Florida (Florida and Tinagli, 2004) and was extended from Europe to a global level. GCI is the equally distributed average between Talent (skills), Technology and Tolerance indicators, where national values for each indicator were normalized on a scale from 0 to 1. Romania occupies the last position in the Global Creativity Index ranking with a score of 0.127. The first three positions are occupied by Sweden (0.808), Japan (0.766) and 0.684 Finland. United States occupies the fourth place with a score of 0.666. Romania's low score comes from all three indicators, the lowest compared to the first classified, was that of innovation (which participates in the formation of the technology index), 433 times lower than in Sweden (0.45 to 195 97).

In the last decade another composite indicator of the creative economy has also been estimated (CICE - Creative Economy Composite Index - Bowen, HP et al., 2006). The indicator takes into account three main components: innovation, entrepreneurship and the level of openness. Each of the three components has three sub-components in its structure. Thus, innovation index takes into account the human resources in science and technology, patent applications and Internet access. Entrepreneurship index is composed of indicators that give information about the number of newly established companies, the fear of failure and venture capital. Openness considers the share of urban population, immigrants and foreign students. The authors have developed and used these indicators in particular at regional level, where they had access to comparable data.

3. Defining the composite index of scientific creativity potential (CISCP)

Creativity is in part the ability to find innovative solutions to problems, create new products or processes, either from existing ones or from nothing. Thus, it appears to be closely linked to innovation and has become evident that promoting and encouraging the innovative character of a nation are essential to future economic development. Among the basic elements, which have a direct impact on the potential for innovative development, one can identify: investment in research and development (financial capital), human resources in science and technology and researchers supply (human capital). Of high importance is also the current scientific performance, that makes a country competitive in the field of science. Based on the above factors, a composite index of the potential of scientific creativity was developed that takes into account and is equally divided among three main elements: human capital (human resources, science and technology and research), financial capital (investment in research and development) and current scientific performance.

Human capital (H). Human capital (skills and knowledge) is regarded as having a crucial contribution in developing the scientific creativity and is a key element of a country's competitiveness. Meeting the demand for highly skilled human resources requires constant investment in education. Human capital has a 1/3 share in CISCAP composition, equally divided between human resources in science and technology and the supply of researchers.

Human resources in science and technology (HRST). A common indicator of the level of human capital in a country or region is the total amount of human resources employed/educated in science and technology. In the index calculation in particular, we took into account those resources holding the proper education, even if they are not working in a field of reference. They are, however, potential resources, benefiting of the necessary foundations. This index includes thus people who have obtained a tertiary degree in a field of science and technology (eg, science, engineering, medicine).

Researchers. Human capital fully devoted to research activity is a direct indicator of the extent to which this area is of interest to a nation. The share of researchers in total employment was taken into account in the analysis.

Financial capital (F) The index takes into account the share in total GDP dedicated to research and development. Research, especially the fundamental one, is most often not self-funding. Government participation is crucial in this respect, most leaders from developed countries, having understood it and pursue it thus with utmost care. This element was given a weight of 1/3 in the composite index calculation.

Scientific performance (S). In order to measure scientific performance, the element taken into consideration is Hirsch national index for each analyzed country. Jorge E. Hirsch (2005) introduced the h-index to quantify the scientific publication output and the impact of the work of researchers. It is a composite measure based on the combination of the number of papers published and the number of citations these papers have received according to records created for and reported by Web of Science (WoS) and Scopus. H-index reflects both the number of publications and the number of citations per publication, making it possible to have a ranking among countries in terms of scientific competitiveness.

For comparability reasons, for each element of the indexes above, data was normalized (to the maximum value obtained), and the normalized values are taken into account in estimating the composite indicator.

Thus, for a country x, the CISCAP is calculated as follows:

$$CISCAP_x = 1/3 * H_x + 1/3 * F_x + 1/3 * S_x$$

4. Estimation of the index at Romanian level and comparison with the other European Union states.

In order to understand Romania's position in terms of innovative/scientific potential, we calculated the indicators developed above for all 27 countries belonging to the European Union. Thus, for each of them H, F,I and S were calculated. Data was extracted from Eurostat website for the first two indicators and while Hirsch indicator was calculated by specialists based on ESI database (Csajbok &all, 2007). Each set of data was normalized from 0 to 1, with reference to the highest vale (assigned as upper limit 1). Starting from here values were then assigned to each country (between 0 and 1).

Thus, for HRST index, the highest value was found and calculated for Finland, where people with tertiary education in science and technology accounted for 41% of the total population. Romania here registered the last position, with a 16%, representing a HRST index of 0.4, almost half the EU average of 0.71. Data were available for 2009, excluding Luxembourg, for which the most recent data available are from 2008. A similar situation was noted for researchers, where Romania's position is also at the lower limit, accounting for 0.33% of total employment, compared to 2.14% in the case of Finland. The index has the value 0.15, while the European average reaches about 0.45. Data were extracted from the Eurostat website, mostly available for 2007, except for the Czech Republic, Estonia and Slovakia (2008), Italy (2006), Greece (2005) and Netherlands (2003). Given that there is a field of reduced fluctuation, which requires a relatively high degree of specialization, we took into account those older data, as well, where recent data was not available.

The financial capital invested (total spending for research and development as a percentage of GDP) is one area where our country is still at the bottom of the range, surpassing, this time with by very little (1%), Cyprus and Latvia. It registered a score of 0.12 compared to Finland, which leads the classification in this case, as well. European Union recorded an average index of 0.4. In this case, the most recent information has been provided by Austria and Finland (2010), and the oldest by Greece (2007), while the remaining information was available for 2009.

As far as the scientific performance is concerned, the highest h-index in EU countries was registered by the United Kingdom, holding a value of 426 and is followed by Germany and France (392 and 362). Romania's h-index amounts to 44, reaching the 20th position out of 27 countries. In terms of normalized values, 9 countries out of 27 register a higher value than 0.5 (with Romania's value reaching 0.1).

Taking into account all the elements we discussed above, a weight was assigned to each calculated index and thus estimated the composite index of scientific creativity potential for each country. Results can be observed in the following graph:

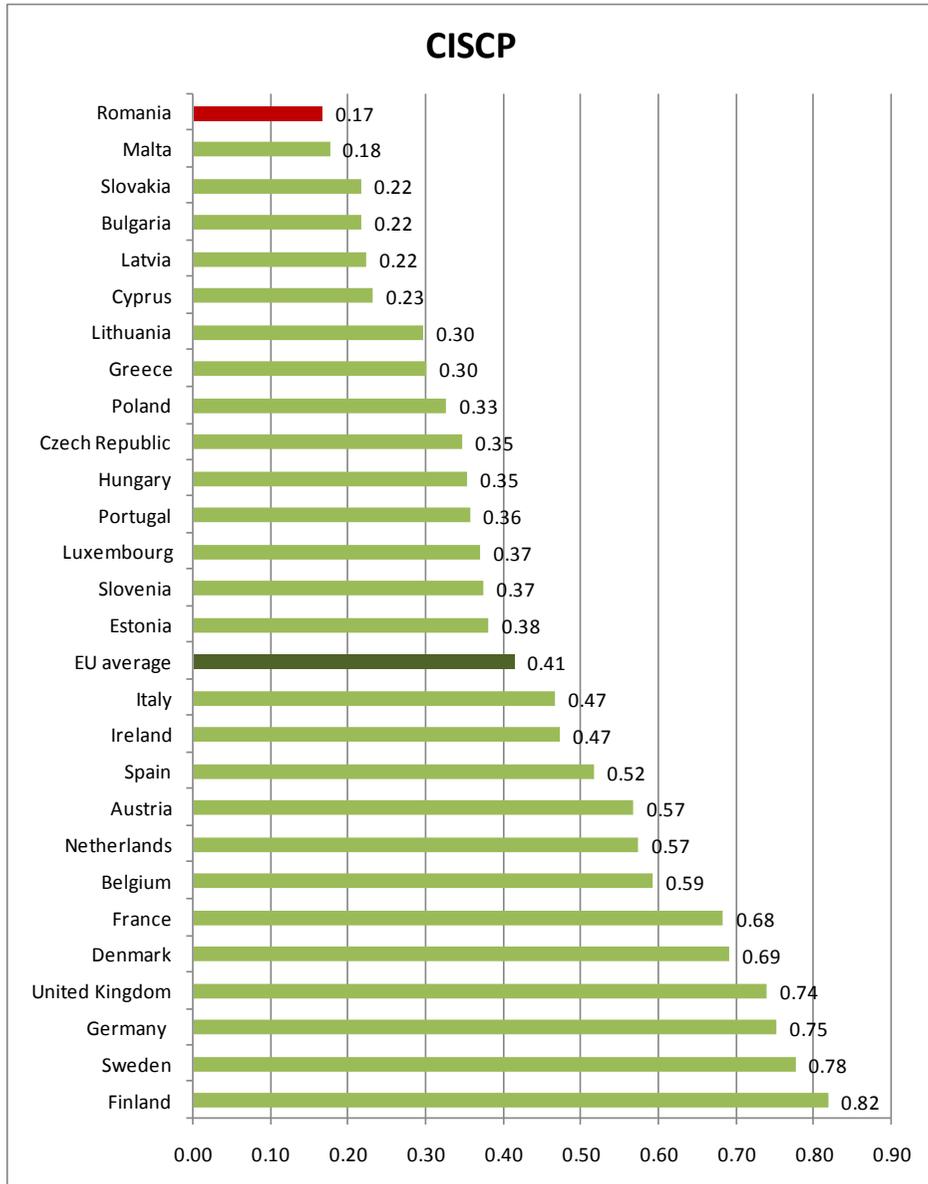


Fig.1. CISCP for EU countries

Source: Obtained by the authors

As a result of the above analysis we observed the fact that Romania occupies, in this case, the last place in the European countries with a score of 0.17. The maximum score, as expected, given the individual values obtained, is registered by Finland and has a value of 0.82. The European average is at the level of 0.41, more than twice the index of Romania.

Conclusions. Romania's scientific potential of is far below the EU average, in some cases even hovering in last place. Given that these resources should underpin a country's competitiveness, it is clear that measures will be needed in order to encourage the development of this potential. Along with greater emphasis on the financial terms for this segment, the orientation towards research should be encouraged as well. At this time there is a vicious circle out of which exist is expected to be relatively difficult. Thus, the attractiveness of potential human resources field is reduced, particularly due to lack of funding and a certain level of performance. Romania is currently facing a potential crisis in research. One reason is the lack of attractiveness for younger generations, both because they no longer see a clear future in this direction, and the lack of a sufficiently advanced level of education. Another reason is the current conditions of the Romanian research, the criteria for measuring performance and remuneration are still ambiguous and poorly applied. This has encouraged and will continue to encourage the exodus of human resources to other countries. At the same time, a high performance level and funding attraction can be achieved only if there is human capital that can support development.

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COMPARATIVE ANALYSIS OF THE RECENT EVOLUTIONS OF ROMANIAN AND EUROPEAN UNION'S COMPETITIVENESS

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The main subject of this paper refers to an analysis of the recent trends and evolution of Romanian competitiveness compared to the European Union competitiveness and it is structured in four main parts. The first section of the paper regards an introduction of the competitiveness evolution process, recalling the three actual evaluation models of the competitiveness level. In the second part of the paper there can be found the competitiveness indexes practiced and published by the World Economic Forum, indicators that are structured on three main levels as following: the Global Competitiveness Index and its aggregate indicators that are developed on three categories of factors that are essential for the competitiveness process (Basic requirements, Efficiency Enhancers, Innovation and sophistication factors) and the indexes associated to the twelve pillars of competitiveness: Institutions, Infrastructure, Macroeconomic stability, Health and primary education, Higher education and training, Goods market efficiency, Labor market efficiency, Financial market sophistication, Technological readiness, Market size, Business sophistication, Innovation. Based on the values obtained after consulting the World Economic Forum Reports and regarding the competitiveness from a global perspective, the third part of the paper presents a comparative analysis of the evolution of the Romanian competitiveness process and the one of the EU25. In the last part of the paper there can be found the conclusions of this analysis, with respect to the values found

Key word: competitiveness, indicators, analysis, differences, evolution

The article's JEL code: O10, O11, O52, O57

Introduction

At the beginning of the XXI century, the world economy is governed by two strong forces: technology and globalization, both of them having an important impact on the companies, economies and countries. Nowadays, when the globalization process is happening significantly, the main objective of any country and nation remains the competitiveness.

After a 235 years long evolution, from Adam Smith [1] to present, the concept of competitiveness is considered by the economists, the governing law of the capitalist economies. Economic literature [2,3,4] presents the important personalities, starting with the year 1776, that have contributed to the development of competitiveness concept.

In 1990, Michael Porter published his work entitled „The Competitive Advantage of Nations”[5], paper in which he mainly resumes all competitiveness related ideas developed ever since. Michael Porter presents them in a universal model, entitled “competitiveness diamante” basically devoted to the companies competitiveness analysis, that is based on the following factors:

- Production factors (4)

- Local / National demand (2)
- External environment of the company (2)
- Related and complementary industries (2)

Nowadays, the competitiveness concept has different approaches, both at company level and at national level, and the recent written economic literature shows that concept is also raising a regional dimension.

The practical importance of competitiveness is designed by a large number of international institutions that manage the research in this field.

- International Institute for Management Development, World Competitiveness Yearbook
- World Economic Forum, Global Competitiveness Report
- World Bank, Doing Business, KAM
- Organization for Economic Co-operation and Development, New Economy Report
- European Commission, European Competitiveness Report

IMD World Competitiveness Centre director, Prof. Stephane Grelli, is the author of certain competitiveness related theories [6]. In this context, one nation's competitiveness factors are distributed by Prof Stephane Garelli in the so called "competitiveness cube", in which every two of the eight facets are connected to the fundamental or essential drivers:

- Economic performance: Attractiveness vs. Aggressiveness
- Governmental efficiency: Proximity vs. Globalization;
- Business efficiency: Stock vs. Processes
- Infrastructure: Cohesion vs Assumed Risk

At the beginning of the XXI century, the world economy is governed by two strong forces: technology and globalization, both of them having an important impact on the companies, economies and countries. Nowadays, when the globalization process is happening significantly, the main objective of any country and nation remains the competitiveness.

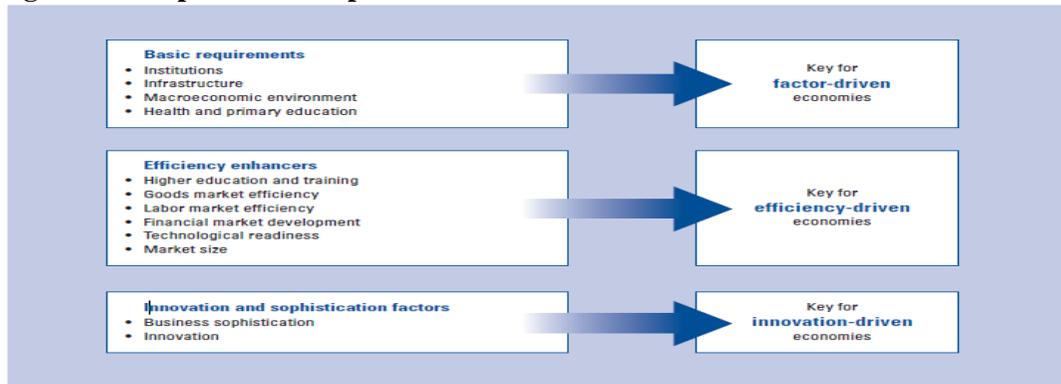
World Economic Forum (WEF) competitiveness index

World Economic Forum is an independent international organization committed to improving the state of the world by engaging business, political, academic and other leaders of society to shape global, regional and industry agendas. Over the past 30 years this institutions has published annual reports regarding the world economy status, has also analyzed policies and economic indicators.

Starting with the year 2005, the World Economic Forum underlies its competitiveness analysis, defined as being an ensemble of political factors plus the Global Competitiveness Index (GCI). This aggregate index has been developed by Prof. Xavier Sala – i – Martin and it is meant to quantify the national performances, by including certain complex aspects, appropriate to the multidimensional phenomenon that this index is modeling [7]: diversity and the numerous competitiveness factors, their evolution through time, positive impact of some key factors (for example Education and continuous formation) and the negative impact of some other factors.

The Global Competitiveness Index evaluation starts from quantifying the competitiveness main factors, that are grouped in 12 pillars [7], presented in Figure 1, where there are also resumed the key directions for competitiveness growth and pillars split in certain specific directions:

Fig. 1: The 12 pillars of competitiveness



Source: *Global Competitiveness Report (GCR) 2010 - 2011*

Every year the World Economic Forum publishes the Global Competitiveness Report, that presents the evaluation methodology of the GCI and the obtained values, for the countries that provided the data needed for the index assessment. The Global Competitiveness Report (GCR) represents an essential document at international level, that is usually consulted by the economic and political actors, with the purpose of identifying the best solutions for improving the competitiveness.

Since 2005 the Global Competitiveness Report evolution refers to its content and inward and outward data accuracy [7,11]. The Reports issued starting with the year 2006 – 2007, are extremely important for Romania, as they are based on the information provided by the Applied Economy Group and are also assumed by certain international institutions, in the context of preparing our country's EU accession.

The main purpose of this paper is to present the Romanian competitiveness level, based on the Global Competitiveness Index values registered in the period 2006 / 2007 until 2010 / 2011.

The following table presents the development stages of different economies, depending on GDP per capita values.

Table 1: Income values for development stages

Stage of development	GDP per capita (in US\$)
Stage 1: Factor driven	< 2,000
Transition from stage 1 to stage 2	2,000–3,000
Stage 2: Efficiency driven	3,000–9,000
Transition from stage 2 to stage 3	9,000–17,000
Stage 3: Innovation driven	> 17,000

Source: *Global Competitiveness Report 2010 - 2011*

Comparative analysis of Romanian competitiveness evolution

The Global Competitiveness Report provides the values for the following indexes:

- Global Competitiveness Index; (GCI)

- The Aggregate Indexes organized in three factor categories that influence the competitiveness (Figure 1 IAC)
- Indexes associated to the 12 pillars of competitiveness (IPC)

The research methodology used in this paper implies following the next steps:

Step 1 – The evaluation of the following measures taken for every type of indexes

The medium value for EU25:

$$I = \frac{\sum_{i=1}^n I_j^i}{n}, \quad (1)$$

where $I = \{GCI, IAC, IPC\}$; $i = 1, 25$ for UE 25 $j = 1$, for GCI ; $j = 1, 3$ for IAC; $j = 1, 12$ for IPC

Romanian competitiveness indexes values deviation, compared to the EU25 average

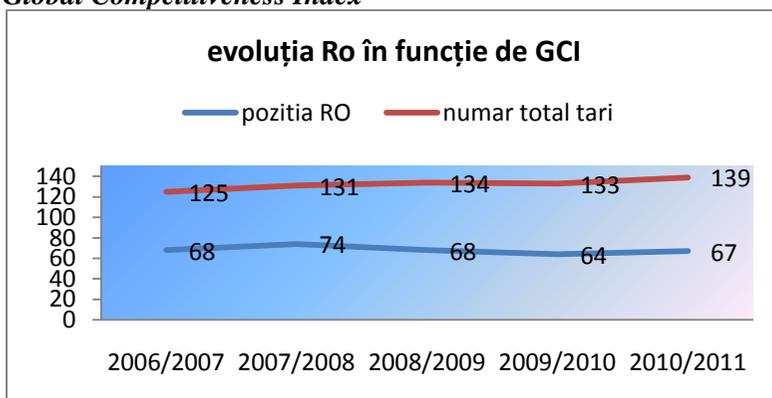
$$\Delta I_j = I_j - I_{rj} \quad (2),$$

where I_{rj} is the *type i and j category* Index for Romania

Step 2 – The graphic representation of the time evolution in the period of deviation analysis: $\Delta I_j = f(t)$

Step 3 – Identifying the Romanian competitiveness strengths and weaknesses, based on the previous characteristics; outlining the possible solutions for increasing the competitiveness. Besides the evaluations and graphic representations, the next figure, Figure 2 presents the evolution of our country's position, considering the value registered by the Global Competitiveness Index compared with the countries listed in the Global Competitiveness Report

Figure 2: The evolution of our country's position, considering the value registered by the Global Competitiveness Index



Source: Author's calculations

It is very important to mention that under the development stage (in Table 1), during the analyzed period of time, Romania is listed in “Group 2”, except 2009 / 2010 when our country is listed in transition from stage 2 to stage 3 countries group

In the following table, Table 2 there are presented the average values of competitiveness index at the EU 25 level and at our country’s level, during the period of time analyzed.

Table 2: Average values of EU (Ij) and Romanian (I_{rj}) competitiveness indexes

Anul		2006/2007 [1]	2007/2008 [2]	2008/2009 [3]	2009/2010 [4]	2010/2011 [5]	
Nivelul indicatorului	UE 25	GCI	4,9672	4,8048	4,804	4,7456	4,7432
		IAC	1	5,3144	5,2636	5,2868	5,1772	5,2664
	2		4,866	4,7244	4,7708	4,746	4,6924
	3		4,6216	4,4972	4,4636	4,4284	4,3868
România	GCI	4,02	3,97	4,10	4,11	4,16	
		IAC	1	4,19	4,07	4,15	4,10	4,36
	2		3,99	3,98	4,18	4,25	4,18
	3		3,52	3,54	3,53	3,44	3,24

Source: Author’s calculations

The following figures, Figures 3, 4 ,5 and 6 present the evolution of GCI, IAC and the 12 pillars of competitiveness deviations.

Figure 3: Deviations associated to GCI and IAC

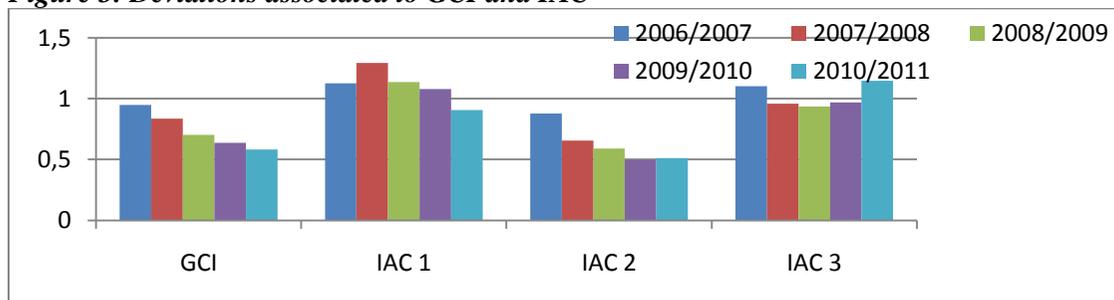
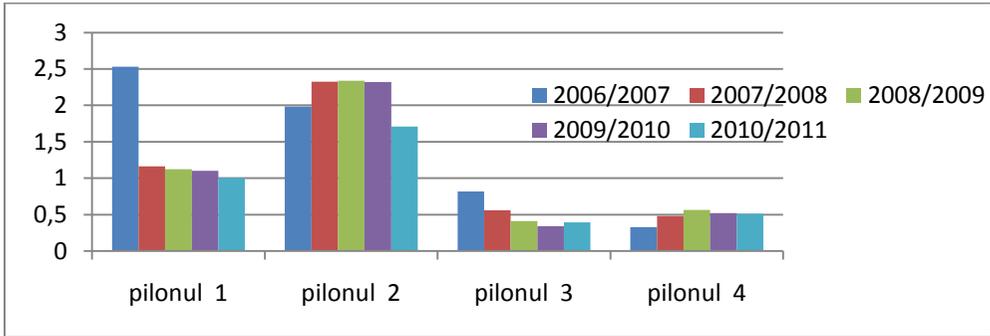
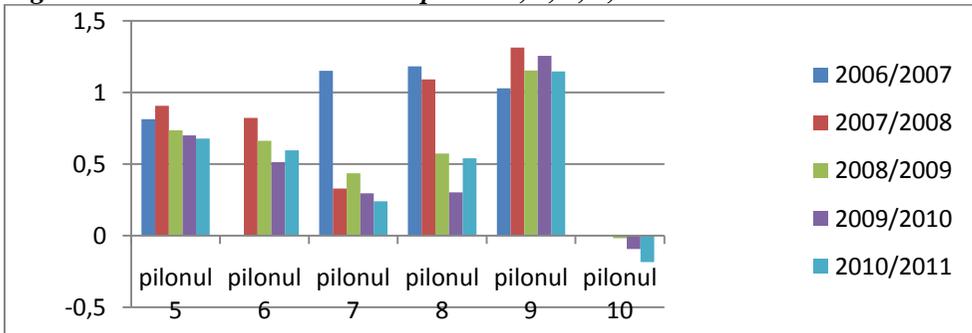


Figure 3: Deviations associated to pillars 1, 2, 3 and 4



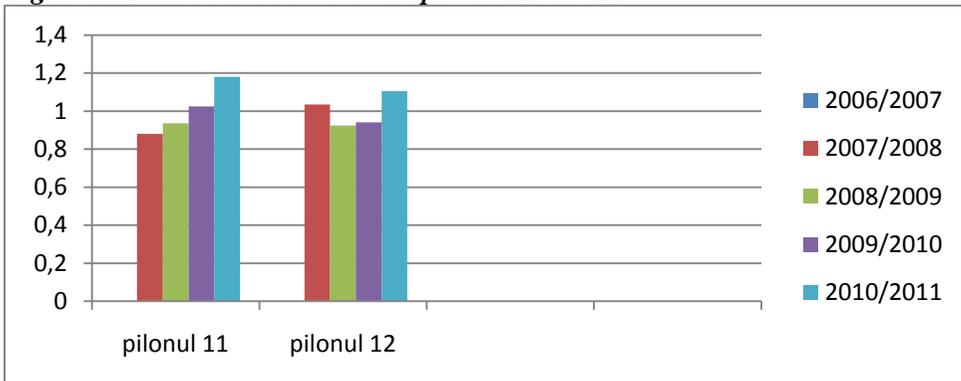
Source: Author's calculations

Figure 4: Deviations associated to pillars 5, 6, 7, 8, 9 and 10



Source: Author's calculations

Figure 5: Deviations associated to pillars 11 and 12



Source: Author's calculations

Conclusions

The Global Competitiveness Report issued by the World Economic Forum is actually a reference document at international level, due to its method of outlining each nation's competitiveness stage.

According to the Global Competitiveness Report for the period of time analyzed 2006 / 2007 until 2010 / 2011:

- Romania tends to occupy the 68th position in the total of 132 (average) countries analyzed;
- Romania is placed under the second group “stage 2 – Efficiency driven” with an average GDP per capita of 3000 and 9000 USD

The evaluations made with reference to the evolution of deviation values of indexes for Romania compared with the EU 25 are the following:

- The obvious tendency of recovering the gap between Romania and EU 25, under the aspect of Global Competitiveness Index
- Recovering the gap between Romania and EU 25 is made with the aggregate index IAC1 and IAC 2
- The aggregate index IAC 3 follows a contradictory evolution in the period analyzed and that leads to a decrease in the competitiveness gap recovery between Romania and EU25.
- Throughout the 12 pillars of competitiveness associated indexes we can note that IPC10 values are over the value of EU25, this being the most powerful gap recovery instrument for the period analyzed. For IPC1, IPC3, IPC5, IPC6, IPC7 and IPC8 the main tendency is to reduce the gap. The indexes IPC11 and IPC12 need to be carefully monitored because they contribute to the increase of the gap between EU25 and Romanian competitiveness, and the indexes IPC2, IPC4 and IPC9 tend to have the same effect, during the period of time analyzed.

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THE ROMANIAN EXTERNAL TRADE AND THE FOREIGN DIRECT INVESTMENTS INFLOWS AFTER 2007. A CRITICAL SURVEY.

Giurgiu Adriana

Focusing more on the evolution of the Romanian external trade and FDI inflows after 2007 – the year of Romania’s EU integration - the paper provides insights in the trade and FDI inflows determinants in the context of the convergence process and also in relation to the financial global crisis. As the statistic data envisage, Romanian exports and imports were high over the period 2000-2010, and there were also large FDI inflows in the economy, mostly until 2008. Although the data appear to be encouraging, it seems that Romania did not succeed to maximize the benefits which should result from such a situation. Moreover, the situation after 2008 shows that Romania is in a deep recession accelerated and maintained by uninspired government policy measures with a strong negative impact on the Romanian economy.

The aim of this paper is to empirically investigate Romanian export and import demand functions after the year 2007, and to compare them with those of the period 2000-2006, using quarterly data, in correlation with the FDI inflows.

The main contribution of the paper is that it is an empirical analysis on Romania’s FDI and external trade, providing the impact of the main determinants of export and import of Romania, by using the Engle-Granger two step method. Following Allard (2009) rather than just providing the elasticity, this method combines the elasticity with the evolution of the explanatory variables to quantify their impact during the analysed period. The analysis aim to cover all possible factors underlying the external sector performance of Romania and thus, they are complemented with country specific analysis. The empirical analysis will therefore provide some interesting insights not only in the context of the convergence process of the country with the Eurozone but also in relation to the exchange rate regime.

The theoretical framework relies on the “imperfect substitutes” model (Goldstein and Khan; 1985), and it is used in the paper to estimate the demand functions of the Romanian exports. Furthermore, the effect of the FDI on export performance is also investigated.

The conclusion which came out was, on one side that the export growth in Romania since 2007 is mainly due to strong FDI inflows since 2000, while the real exchange rate appreciation seems to not have significant impact on export developments of the country. On the other side, the significant imports growth was due to strong reduction in productivity and in the gross capital formation rate, which combined with the lack of domestic capital, have largely affected the private sector, and mainly the manufacturing one, on which the Romanian economy should rely on, mainly due to its competitiveness.

Key words: external trade, FDI inflows, exports, imports, Romania’s economy

JEL Codes: F14, F15, F21, F43

IS THERE ANY CORRELATION BETWEEN THE CHRONIC BALANCE OF TRADE DEFICIT AND THE ROMANIA'S INCREASING EXTERNAL DEBT?

Giurgiu Adriana

According to the data provided by the Romanian National Institute of Statistics and Eurostat, the balance-of-payments current account registered a permanent and increasing deficit since 1990, while the domestic production was accelerated decreasing and the FDI inflows were far from being enough to cover the internal consumption needs. These being the facts, the present paper aims to underline the fact there is a direct correlation between the increasing external debt of Romania in the last years, and the balance of trade increasing deficit, which is due mainly to the lack of domestic capital, as well as to the decreasing productivity. The research methodology is based on a theoretical model of external debt sustainability, using time series data for Romania and using a multi-equation model.

The results show that the relationship between external debt and the balance of trade deficit should be analysed with a simultaneous equation model, because there is a two-way relationship between debt service and deficit growth: the higher the imports, the higher the external debt, and as a consequence, the higher the balance of trade deficit, if the productivity is low. This result is consistent with the Romanian experience, and its implications are very large and will multiply over the years, if there will be no adequate policies meant to revival the private sector, mainly the SMEs.

In this respect, the paper concludes that the Romanian government should immediately take the necessary measures to facilitate the easy access to capital for the private investors, which will further stimulate the internal production, with a direct impact onto the increase of exports, which will determine on the one hand, the reduction of the balance of trade deficit and simultaneous, the increasing of the necessary budgetary revenues to pay back the external debt. Otherwise, all costs will be supported by the next generations, with no return, if the probability for declaring "default" will be successfully surpass in the short run.

Key words: Romanian external trade, balance of trade, current account deficit, external debt

JEL Codes: F14, F15, F21, F32, F36

FINANCING INSTRUMENTS USED IN THE CENTRE DEVELOPMENT REGION

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The paper presents the main financing instruments (projects) used in the Centre Region, approaching aspects regarding the Centre Development Region, such as its features in terms of the geographical profile of employment. In regard to the involvement of the population to the economic life, statistics show relatively low values of the overall activity and employment rates recorded primarily in the rural area. If we consider only the population included in the age group 15 to 64, the active population represent 62.2% of total, and the employment rate is 56.3% of the total active population, both declining in the last 15-20 years. At regional level, in order to implement the regional development policy in accordance with Law no. 315/2004 on regional development in Romania, two institutions are functioning: Regional Development Board and “Centru” Regional Development Agency. The paper also presents the use dynamics of funds in the Centre Region. Starting with 2007, “Centru” Regional Development Agency has become an intermediary body within ROP 2007-2013 with the role of promoting and managing the funds allocated to this region. In regard to the stage of implementation of ROP in the Centre Region, starting with February 25th, 2011, all 12 key areas of intervention of the programme were launched and a number of 1.053 projects were submitted in the Centre Region for a total amount of 1.033,99 million euro, the paper showing a diagram of the submitted projects. There is also a diagram of the amounts requested for funding the projects submitted until February 25th, 2011 at the Centru RDA and the available financing budgets on priority axes. Until February 25th, 2011, a number of 174 projects were contracted under ROP for a total value of 1.549.430.419,97 lei. In the end, we review the main indicators of the contracted projects. They belong to rural development, transport infrastructure, social infrastructure, regional and local business environment, tourism development and promotion.

Key words: Centre Region, labour force, project, indicators, structural funds

JEL codes: R1, R58

CENTRE Development Region

In the context of the economic and political changes that took place in our country, it was required and important steps have already been taken towards ensuring a proper institutional structure for adopting and implementing a coherent policy of regional development. On these lines, based on Law no. 151/1998 repealed and replaced by Law no. 315/2004 on regional development in Romania, were established eight regions of development in Romania and the institutions that implement the regional development policy at the level of

these development regions – Regional Development Agencies and Regional Development Boards.

The development regions represent the framework for developing, implementing and assessing policies of regional development, as well as programmes of economic and social cohesion. Development regions also represent a framework for collecting specific statistical data in accordance with European regulations developed by EUROSTAT for the territorial units for statistics NUTS II.

In this context, by associating the administrative and territorial units of Alba, Braşov, Covasna, Harghita, Mureş and Sibiu countries, the “CENTRU” Development Region was created.

This geographical area is not an administrative and territorial unit and has no legal personality; it represents only the application framework of the regional development policy at the level of the six counties. The implementation of the regional development policies in the Centre Region is done by the “Centru” Regional Development Agency.

In regard to the involvement of the population to the economic life, statistics show relatively low values of the overall activity and employment rates, recorded primarily in the rural area. If we consider only the population included in the age group 15 to 64, the active population represent 62.2% of total, and the employment rate is 56.3% of the total active population, both declining in the last 15-20 years

At regional level, in order to implement the regional development policy in accordance with Law no. 315/2004 on regional development in Romania, two institutions are functioning:

Regional Development Board;

“Centru” Regional Development Agency.

The use dynamics of funds in the Centre Region

From the moment it was set up until the accession of Romania to the European Union in 2007, Centru RDA, as implementing authority, had managed at regional level a series of financing programmes with funds from the European Union, as well as from the Romanian Government. The main pre-accession fund of EU managed at regional level by Centru RDA was **PHARE, component of Economic and Social Cohesion**. On these lines, 20 financing schemes of the PHARE 1998 – 2006 programme were carried out and they provided funding in areas like: supporting the SMEs sector, development of human resources, social infrastructure, educational infrastructure, environmental infrastructure (waste management, water supply and sewage), local and regional infrastructure (transports, tourism, business structures). These funding schemes helped implement in the Centre Region a number of **472 projects with a total value of 95.32 million euro, 55,71 million euro of this amount being non-refundable funds**.

Between 1998 and 2006, Centru RDA also managed a series of programmes with funding from the state budget, which focused on investments for the support of companies located in areas with problems, investments in tourism and in social services. Thus, **95 regional projects** were implemented, **having a total value of 21,82 million euro, 9,04 million euro of this amount being non-refundable funds**.

These projects created: 1617 jobs, 27 waste collection systems, rehabilitated county roads, 17 streets and alleys and 3 bridges rehabilitated in Sovata resort, 9 rehabilitation works of the water supply and sewage network, 1 industrial park, rehabilitation of 38 schools and resource centres, 4 new workshops, 12 rehabilitated workshops, 20 social centres (new and

rehabilitated), 374 training courses, 18.361 trained people, 32 environmental studies and projects, 11 feasibility and business management studies.

Since 2007, after Romania's accession to the European Union, Centru RDA has become an Intermediary Body within the **Regional Operational Programme 2007-2013**, whose role is to promote and manage the funds allocated to the Centre Region through this programme. As such, the Regional Development Agency takes over some of the tasks of the Management Authority – established in the structure of the Ministry for Regional Development and Tourism.

ROP implements the key elements of the National Strategy of Regional Development of the National Development Plan (NDP), contributing together with the other Sectoral Operational Programmes to achieving the objective of the National Strategy of Regional Development and of the National Strategic Reference Framework, namely to reduce economic and social development disparities between Romania and the EU member states. The Regional Operational Programme was approved and became operational on July 12, 2007.

The strategic objective of the Regional Operational Programme 2007-2013 consists of supporting the economic, social, territorially balanced and sustainable development of Romanian regions depending on their specific needs and resources, with emphasis on the urban growth poles, the improvement of the basic infrastructure and of the business infrastructure in order to make Romania's regions, especially those a little behind, more attractive places to live, visit, invest and work.

The Framework Document for Implementation – a national programmatic document – was developed on the basis of the Regional Operational Programme and details, on areas of intervention, who are the beneficiaries of projects, eligible activities, eligibility and selection criteria for projects, the size of financial allocation, the implementation, monitoring and evaluation system. The Framework Document for Implementation of ROP was approved by joint Order of the Ministry of Economy and Finance no. 403260/06.06.2008 and Ministry of Development, Public Works and Housing no. 736/06.06.2008, amended by Order of the Ministry of Regional Development and Tourism no. 2653/20.12.2010 and Order of the Ministry of Public Finance no. 25/04.01.2011.

The Regional Operational Programme comprises 6 priority axes at national level, which include 14 key areas of intervention. These 6 priority axes are:

Axis 1 - Support to sustainable development of cities – urban growth poles

Axis 2 – Improvement of regional and local transport infrastructure

Axis 3 – Improvement of social infrastructure

Axis 4 – Strengthening the regional and local business environment

Axis 5 – Sustainable development and tourism promotion

Axis 6 – Technical assistance

Through ROP, 3,726 billion euro are allocated to Romania from the European Regional Development Fund for the period 2007-2013. In addition, the national contribution (public and private) is 0,703 billion euro, the total sum allotted through ROP being 4,437 billion euro.

The financial allocations for each region were established during the first meeting of the Regional Operational Programme Monitoring Committee (ROPMC), which took place on August 16, 2007. **The Centre Region - Alba, Braşov, Covasna, Harghita, Mureş and**

Sibiu counties – was allotted 10,9% of the total ROP budget for Romania, meaning 483,62 million euro for the period 2007-2013, of which 455,48 million euro came from ERDF and the state budget. The allocation of funds on development regions was done in accordance with the objective of ROP 2007-2013 regarding **the support of a balanced development for all the regions of Romania**, inversely proportional with the development level of the regions. In this regard, the less developed regions and areas received more money in order to prevent the increase of existing economic and social disparities between regions. To achieve a fair distribution, they used as indicators the Gross Domestic Product per capita, adjusted with a coefficient of population density.

The ROP budget was distributed on axes, as follows: sustainable development of cities (31,36% of ROP budget), improvement of regional and local transport infrastructure (19,76%), improvement of social infrastructure (14,81%), strengthening the regional and local business environment (17,93%) and sustainable development and tourism promotion (16,14%).

The financial allotments of ROP established as percentage on regions, axes and areas within the ROPMC meeting don't have a definitive character. During the implementation of the programme and as a result of intermediary evaluations, the ROP Monitoring Committee may approve reallocation between certain axes and/or areas of intervention.

The implementation stage of ROP at the level of the Centre Region

Until **February 25th, 2011**, all 12 key areas of intervention of the programme had been launched and a number of **1.053 projects had been submitted in the Centre Region** for a total amount of 1.033,99 million euro.

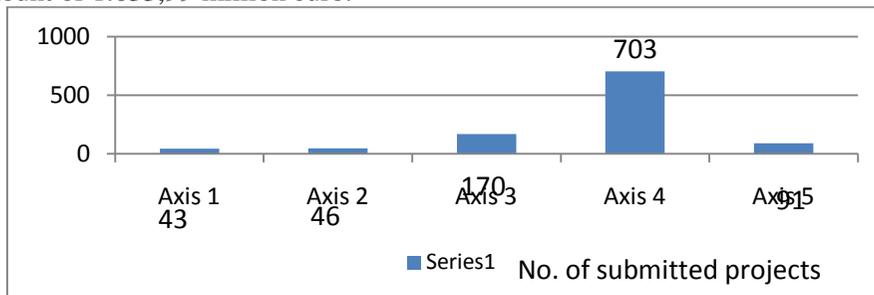


Fig. 1 Number of submitted projects

Of the 1053 submitted projects:

-174 projects have been contracted: 14 projects within Priority axis 1, 13 projects on key area of intervention 2.1 of ROP 2007-2013 – “Rehabilitation and modernization of county roads and urban streets network – including construction/rehabilitation of ring-roads”, 4 projects on key area of intervention 3.1 – “Rehabilitation, modernization and equipping of health services’ infrastructure”, 8 projects on key area of intervention 3.2 – “Rehabilitation, modernization, development and equipping of social care infrastructure”, 1 project on key area of intervention 3.3 – “Improvement of equipment used by operational units for public safety interventions in emergency situations”, 16 projects on key area of intervention 3.4 – “Rehabilitation, modernization, development, and equipping the school infrastructure for

undergraduate, vocational training and university education”, **2** projects on key area of intervention 4.1 – “Development of sustainable business support structures”, **99** projects on key area of intervention 4.3 – “Support for the development of micro-enterprises”, **5** projects on key area of intervention 5.1 – “Restoration and sustainable promotion of cultural heritage; setting up/modernising related infrastructure” and **12** projects on key area of intervention 5.2 – “Creation, development, modernization of tourism infrastructure for the sustainable promotion of natural resources”, with a total value of the requested amount of **257,58 million euro**.

-149 projects are in the pre-contractual phase: 10 on Priority axis 1; 4 on KAI 2.1; 2 on KAI 3.1; 9 on KAI 3.2; 8 on KAI 3.4; 6 on KAI 4.1; 1 on KAI 4.2; 103 on KAI 4.3; 2 on KAI 5.1 and 4 on KAI 5.2 with a total value of the requested amount of 107,64 million euro;

-104 projects are on the reserve list – 12 on KAI 2.1; 6 on KAI 3.1; 11 on KAI 3.2; 56 on KAI 3.4; 4 on KAI 4.1; 15 on KAI 5.1. These are projects that are not funded, but passed the technical and financial evaluation or the evaluation of conformity and eligibility according to the instructions of ROPMA, with a total value of the requested amount of 232,43 million euro.

-186 projects are in different stages of evaluation and selection with a total value of the requested amount of 71,69 million euro;

-440 projects were rejected: 12 on KAI 1.1; 17 on KAI 2.1; 2 on KAI 3.1; 17 on KAI 3.2; 22 on KAI 3.4; 19 on KAI 4.1; 1 on KAI 4.2; 306 on KAI 4.3; 10 on KAI 5.1; 34 on KAI 5.2.

The diagram (Fig. 2) of the amounts requested for funding by the projects submitted **until February 25th 2011** at Centru RDA and of the available budgets on priority axes is presented below:

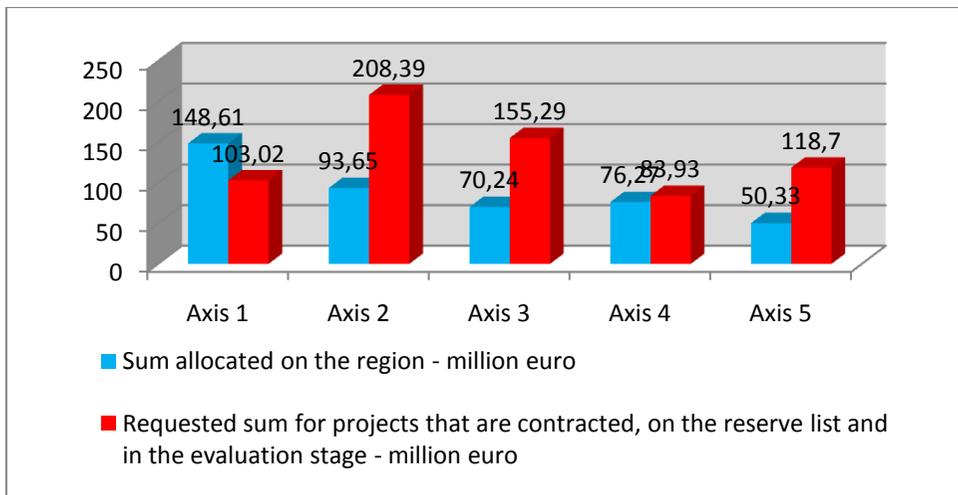


Fig. 2 Available funds, requested funds

Given the mentioned aspects, we may say the total value of the requested amount by the contracted projects, by the projects in the pre-contractual phase, on the reserve list or in the

evaluation stage within ROP at the level of the Centre Region at February 25th, 2011 **represents approximately 152,44%** of the funds allocated for the Centre Region by ROP 2007-2013.

The implementation of the contracted projects:

Until February 25th, 2011, in the Centre Region, a number of 174 projects were contracted under ROP for a total value of 1.549.430.419,97 lei, of which the requested amount is 1.104.220.309,58 lei.

Table. 1 The main listed and achieved indicators of the contracted projects

Priority axes/ Key areas of intervention	Indicator	
	Listed in contracted projects	Achieved
1. Urban development		
1.1. Integrated urban development plans	26 streets totalling 18,78 km 89.224,49 sqm of access roads and modern passage ways 14.651,71 sqm of built bike trails 4.784,78 sqm of built pedestrian system 8.071 sqm of degraded and unused space that was rehabilitated and turned into a green area 4 rehabilitated social centres	
2. Transport infrastructure		
2.1. Rehabilitation and modernization of county roads and urban streets network – including ring-roads	201,18 km of rehabilitated county roads 6,43 km of ring-roads 20,219 km of rehabilitated urban streets	39 km of country roads 3,62 km of urban streets 6,43 km of ring-roads

3. Social infrastructure		
3.1. Rehabilitation, modernization and equipping of health services' infrastructure	4 rehabilitated specialized outpatient centres	
3.2. Rehabilitation, modernization, development and equipping of social care infrastructure	5 rehabilitated social centres for disabled persons; 5 rehabilitated residential social centres for elderly; 1 centre of neuropsychiatric recovery and rehabilitation; 1 medical and social unit - modernization	5 rehabilitated social centres for disabled persons; 1 rehabilitated residential social centres for elderly
3.3 Operational units for public safety interventions in emergency situations	40 equipped mobile units	40 equipped mobile units

3. Social infrastructure		
3.4 Rehabilitation, modernization, development and equipping of the school infrastructure		
	18 rehabilitated schools	
4. Local and regional business environment		
4.1. Development of sustainable business support structures		
	2 built business centres	
4.2 Rehabilitation of disused polluted industrial sites and preparation for new activities		
4.3 Support for the development of micro-enterprises	76 micro-enterprises - modernization 291 new jobs created	43 micro-enterprises - modernization 201 new jobs created
5 Tourism development and promotion		
5.1. P Restoration and sustainable promotion of cultural heritage; setting up/modernising related infrastructure	3 rehabilitated fortresses of cultural heritage 18 fortified churches restored and incorporated into the tourist circuit 1 restored evangelical church of cultural heritage	
5.2 Creation, development, modernization of tourism infrastructure for the sustainable promotion of natural resources	7 upgraded accommodation units; 3 developed recreation units; 3 built mountain rescue units and 1 rehabilitated mountain rescue unit; 1 new ski slope of 540 m 181 new jobs created	

The absorption degree of EU funds in the Centre Region for the Regional Operational Programme **was 11,20%** on February 25th, 2011, taking into account only the value of the paid reimbursement claims.

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ROMANIAN INVESTMENT POLICY ANALYSIS

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Starting with the year 2009, the European Union, as well as the rest of the world, was affected by the economic and financial crisis, and one of the effects reflected in the decrease of foreign direct investment (FDI) projects and also in the reduction of their host locations. Creating a healthy economic environment, that should be efficient for any form of international investment, represents the nowadays challenge of all market economies. This paper concentrates on analyzing our country's attractiveness from the international investor's perspective, it also focuses on the Romanian investment policy, its investment climate, as well as on identifying or valuating the strengths and opportunities offered by Romania. The advantages of the foreign direct investments are universally recognized and they basically include the expansion of the production capacity and income, job creation, technologically diffusion and economic development. Creating an appropriate economic environment, that is efficient for any form of international investments represents the nowadays challenge of all market economies. OECD member states experience, for example, outlines the advantages of a functional legal and normative climate, based on the principles of transparency and non discrimination, that are essential for attracting foreign investments. In the actual competition for attracting FDI, every state tries to offer as many incentives to the future foreign investors. The Romanian investment policy sets out incentives in a non-discriminatory and transparent way offering the investors the specific criteria. The Romanian business environment has improved significantly in recent years, driven in particular by EU accession. Major progress has been recorded in areas such as the fiscal environment, rule of law, the fight against corruption and property registration. When considering our country a possible location for the development of their businesses, the foreign investors are driven by the advantages offered for encouraging the FDI attraction, and so, they closely analyze the following aspects and advantages: geographic and market related advantages, the Romanian resources (natural, material, human resources), economic, politic and social drivers and also international status, regarding the diplomatic bilateral agreements.

Key words: Foreign direct investment (FDI), investment policy, incentives, attracting FDI, economic development, economic growth, investment climate

The article's JEL code: F21, F23, F55

Introduction

The advantages of foreign direct investments (FDI) are universally recognized and they basically include the expansion of the production capacity and income, job creation, technologically diffusion and economic development. Creating an appropriate economic environment, that is efficient for any form of international investments represents the nowadays challenge of all market economies. OECD member states experience, for

example, outlines the advantages of a functional legal and normative climate, based on the principles of transparency and non discrimination, that are essential for attracting foreign investments.

In my opinion, FDI can be easily attracted when the investors understand very well the environment in which they will operate, that is why for an investment policy to be efficient, it is necessary to be focused on the transparent legal environment based on the principle of stability and predictability, and also on actions and services concentrated on promoting the investments.

The principle of national treatment refers to the fact that the governments of FDI host countries' must treat the foreign investors as well as the national investors. Practically, the majority of countries still maintain some restrictions regarding the foreign investments, in order to protect some industries considered strategic.

Lately, Romania registered an important progress in including the national treatment in its investment policy, eliminating a great part of its restrictions. In Romania, the forms of national treatment restrictions are the following:

- a 49% foreign ownership limitation in industries and sectors related to arms manufacturing, trading and production
- a limitation on foreign ownership of agricultural land
- restrictions on the purchase of real estate in areas deemed sensitive, e.g. forests, border zones, national parks and historical areas

The Romanian business environment has improved significantly in recent years, driven in particular by EU accession. Major progress has been recorded in areas such as the fiscal environment, rule of law, the fight against corruption and property registration. Harmonisation of the fiscal system with EU legislation and norms has brought about a modern and predictable tax system. Moreover, lower corporate and personal tax rates have contributed to improving the fiscal environment. Strengthening the rule of law has also been a priority. New legislation was passed in 2006 to improve transparency, and a National Integrity Agency was established in 2007. Public awareness campaigns to fight corruption in public administration and the judiciary have been carried out over the past two years (FIC, 2009). Romania is also member of WTO and applies the rules of TRIMS and GATS and it is the only country in the South Eastern Europe that signed OECD Declaration on International Investments and Transnational Corporations.

The transfer of capital, the repatriations of profits and liquidities is an essential determinant of FDI, contributing to any state's capacity of attraction and absorption of FDI. In Romania, the capital inflow from FDI is free and without delays.

In the actual competition for attracting FDI, every state tries to offer as many incentives to the future foreign investors. OECD defines the FDI incentives as "measures ment to influence the size, location and industry of a FDI project, by modifying its cost or its associated risks, throughout several conditions that are not available for the national investors".

The incentives offered to the foreign investors may take the form of fiscal, financial and normative incentives. Romania offers the following incentives to the international investors:

- Tax exemptions: total or partial reductions on the earnings tax for a certain period of time;
- Grants: based on the number of jobs created;
- Special zones: access to industrial parks;

-Free trade areas

The Romanian investment policy sets out incentives in a non-discriminatory and transparent way offering the investors the specific criteria.

The performance requirements represent certain conditions imposed by the host countries to foreign investors. According to an OECD study released in 2010, Romania meets all these requirements, due to its WTO membership and its status of TRIMS Agreement signatory.

Secure and transferrable rights to rural, urban and other types of land and forms of property are a prerequisite for a healthy investment environment. Well defined property rights represent determinants that attract and maintain FDI.

After our country's accession to the EU, foreign investors are allowed to own residential, industrial and agricultural land.

Intellectual property rights give investors an incentive to locate their businesses in Romania, when referring to the development of new products and services. It also gives investors the needed confidence to expand their production throughout Joint Ventures and licensing agreements. Due to its EU and WTO membership, Romania made an important progress in its efforts of defining the intellectual property framework.

The compensation of expropriation is another important incentive in the process of attracting FDI, but in certain situations the governments may legitimately need to enter in possession of certain private property, like in some cases of transport and energy infrastructure development projects. In Romania, the compensation of expropriation or the nationalization process takes place under constitutional provisions, that are different from Romanian FDI legislation.

Economic and investment climate in Romania

According to the Europe's Investment Attractiveness Report issued in 2010 by Ernst&Young, the foreign investors interest for Europe and also Romania reduced significantly. Compared to the year 2008, in 2009 Europe registered a 11% decrease in the number of FDI projects and a 16% decrease in the number of jobs created, also being confronted to serious difficulties due to investors lack of capital and the tightening of financing conditions.

In 2009, the number of FDI projects almost halved and the number of jobs created reduced with almost 44%. According to the same Ernst&Young study, Romania registered a 48% decrease of the number of FDI projects and a 44% in the number of jobs created, compared with the previous year.

In 2009, Romania attracted 75 FDI projects, this number representing 2% of the total number of projects attracted in Europe, generating 6.384 new jobs or 5% of the total number of jobs created.

In 2009, Romania classified the seventh in Europe according to the number of jobs created, and eleventh according to the FDI share in the total FDI.

Despite the difficult period that challenges our country from this point of view, Romania is still considered an attractive destination for industrial FDI projects, representing 7% of the total number of FDI projects in Europe.

Our country's accession to the EU, materialized in a period of economic growth, occupying the second position in South Eastern Europe, considering the value of GDP per capita of 12600 USD. According to the information presented by the IMF (in 2009), Romania recorded a medium annual GDP growth of 6% in the period 2003 – 2007, increasing in 2008

at 7.1%. This increase was due to the strong internal demand and investments. In 2009, our country's economic growth slowed down considerably, and according to the European Commissions' forecasts, it decreased significantly with 8%. Romanian government negotiated a 12.3 billion USD Stand By Agreement with the IMF and the crisis generated by the measures taken strongly affected the financial sector, most of the banks canceling their development plans and restricting their regulatory framework.

Our country was considered an attractive location for the foreign investors due to its low labor costs and taxes, also to its developing market and its accession to the EU. In 2008, the FDI inflows represented 9.1 billion USD, in other words 6.7% of GDP (UNCTAD 2009). The main sectors that benefited from FDI were constructions, real estate, industrial sector, financial services and insurance (FIC 2009).

Romanian business environment improved considerably with our country's EU accession, occupying the 55th position in the top published by the World Bank in 2010, being the second in the South Eastern Europe economies.

The fields the improved the most were the financial sector, the rule of law, the fight against the corruption

and the intellectual property. The fiscal system harmonization with the EU legislation and norms materialized with a new, modern and predictable taxation system. But a slow - down in the reform process could also be noticed after Romania joined the EU in January 2007, some fields still needing important changes, like the corporate governance for example.

As regarding the investments promotion, Romania is in process of revising the Foreign Investments Promotion Agency. Romanian should also increase the quality of the services offered to the foreign investors in the pre and post – entrance phase, regarding: the consultancy offered in order to business registration, licenses and work permits. It could also consider the implementation of a certain program that should facilitate the commercial connections between the foreign investors and the local companies.

When considering Romania a possible location for their business development, the foreign investors look closely to the advantages offered by our country. In this context, according to the Romanian Agency for Foreign Investments there were identified certain advantages offered in order to attract FDI.

From a *geographical and market perspective* Romania is one of the largest markets in Central and Eastern Europe (ranking 7th , with over 21 million inhabitants); EU unique market gateway (access to approximately 500 million consumers) and is also an attractive location: situated at the turning point between EU, the Balkans and CIS countries, our country is crossed by three important pan-European transportation corridors: corridor no. IV linking Western and Eastern Europe, corridor no. IX connecting Northern and Southern Europe and no. VII – Danube River, facilitating inland water transportation, at the same time connecting the Romanian Port of Constanta (the biggest Port to the Black Sea) to Northern Europe, through the Rhine.

From the *resources perspective* Romania owns highly skilled labor force at competitive prices (solid knowledge in foreign languages, technology, IT, engineering, etc); rich natural resources, including surface and underground waters, fertile agricultural land, oil and gas; high potential for tourism.

From the *international perspective*, foreign investors have the following advantages: EU, WTO and NATO membership, member of the UN and other international organizations, like: OSCE, Council of Europe and International Organization of La Francophonie.

From the *economic perspective*, Romania offers the following incentives: Tax exemption of the reinvested profit; state aid schemes for encouraging investors to take upon Romania; increasing interest on behalf of Foreign Investors – leader destination for FDI in the region (2010 A.T. Kearney Foreign Direct Investment Confidence index) and also sound fiscal policy (16% flat tax).

From the *legal perspective*, the foreign investors have similar legal provisions as in the EU (Acquis Communautaire implementation); fiscal policy regulated by the Fiscal Code.

Other advantages are the continuously improving infrastructure (commitment to improve the highway infrastructure to EU standards); well-developed networks of mobile telecommunications in GSM systems; developed industrial infrastructure, including oil and petrochemicals; extensive maritime and river navigation facilities.

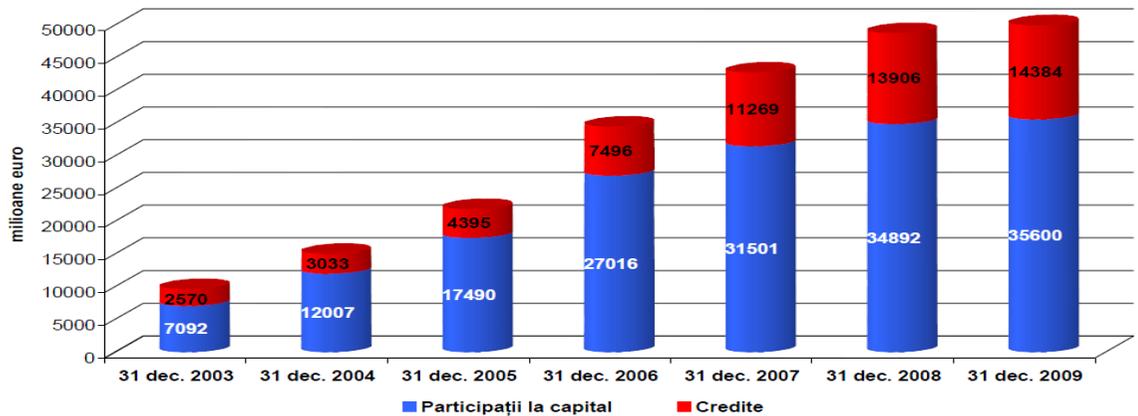
FDI in Romania

The net FDI inflows in Romania in 2009 reached 3488 million euro and their structure is the following: *foreign investors net participations* to the FDI social capital registered 1729 million euro (49.6% of the net FDI flow) and the *net credit of Joint Ventures* coming from the foreign investors summed 1759 million euro (50.4% of the net FDI flow).

In 2009, the *FDI stocks* summed up 49984 million euro, 2.4% more than in 2008.

The social capital participations (including the reinvested profit) of FDI registered 35600 million euro (71.2% of the final stock of FDI), 2% more than in the previous year and the *total net credit* of FDI registered reached 14384 million euro, representing 28,8% of the total FDI stock and also presenting a 3.4% increase compared with the previous year.

Figure 1: FDI flows analysis in Romania during 2003 – 2009

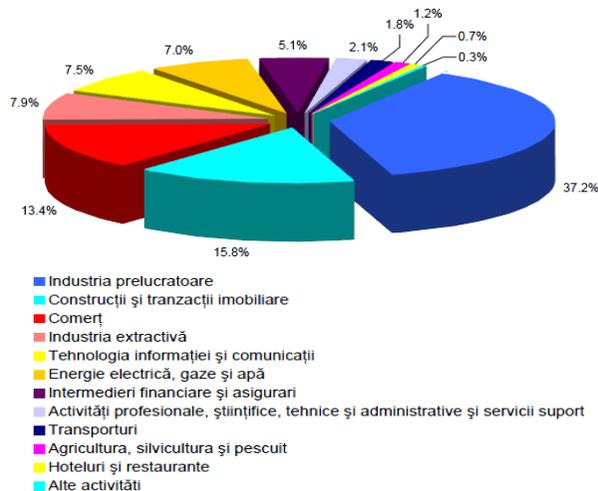


Source: Information published in the NBR FDI Report, 2009, available at link <http://www.bnr.ro/Investitiile-straine-directe-%28ISD%29-in-Romania-3174.aspx>

From the investors orientation perspective, FDI were located in the *manufacturing industry* (31.1% of the total) and the best represented sectors being petrol, chemicals, plastic masses (6.3% of the total), metallurgy (5.2%), transport industry (4.7%), food, beverages and tabaco industry (4.1%) and cement, glass and ceramics (3.3%). The textile and confection field (1.4%) registered value is less than expected.

Expect the industry field, other sectors that attracted important FDI are *financial services and insurance* representing 19% of the total FDI inflows, *constructions and real estate transactions* (12.9%), *trade and retail* (12.3%) *ITC* (6.5%)

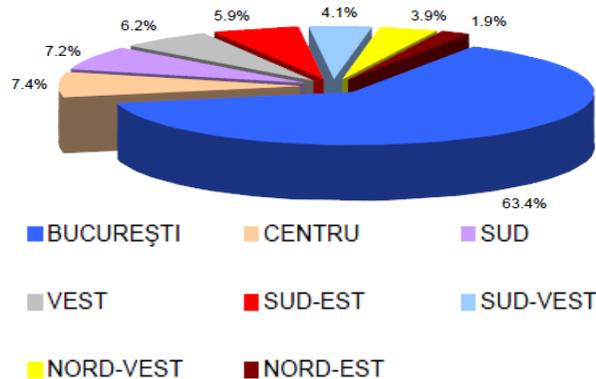
Figure 2: FDI stock structure in Romania - 2009



Source: published in the NBR FDI Report, 2009, available at link <http://www.bnr.ro/Investitiile-straine-directe-%28ISD%29-in-Romania-3174.aspx>

From a territorial perspective the orientation of FDI is clearly heading to Bucharest – Ilfov development region (63,4%), but other FDI host regions are: the Centre Region (7,4%), South Region (7,2%), West Region (6,2%) and South – East Region (5,9%). The North East Region is the least attractive one for the foreign investors, registering only 1.9% of the total amount of FDI.

Figure 3: FDI structure on development regions - 2009



Source: published in the NBR FDI Report, 2009, available at link <http://www.bnr.ro/Investitiile-straine-directe-%28ISD%29-in-Romania-3174.aspx>

Romania's competitive advantage compared to the other countries in the region is not represented by the low cost labour force, in my opinion the market dimension is the driver that counts. After Poland, Romania has the most important consumption potential, hosting a bigger population than Hungary and Bulgaria together.

In conclusion, if Romania doesn't want to lose its few foreign investments attracted until now (less than Hungary and Poland in 2008) the national authorities should focus its actions on stimulating the consumption rather than the excessive fiscal system.

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NEEDS OF LOCAL SUSTAINABLE DEVELOPMENT

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In terms of structure of local authorities, we made an analysis of how the principle of sustainable development applies by highlighting the fact that it differs locally in structure and content from the overall development which shall be addressed at national level. Locally, we have identified disruptions that may adversely affect the implementation of sustainable development policies. It is about the existence of undue restrictions in allocating funds from the state budget. In most cases these restrictions have a political tint. Specifically, we stressed the requirements of sustainable development in Romania, consisting mainly of a responsible financial management and human resources management, towards meeting the needs of local people.

Keywords: sustainable local development, local administration, public policy, public services

JEL code: Q50, H76, H83, M41

1. Remarks on the development in general and local development in Romania

The concepts and mechanisms resulting from research show that worldwide there is particular interest to implement policies on sustainable development which means mainly meeting the needs of the present generation without compromising the needs of future generations and the development of the free man, that must take place in harmony with the environment and, as a must, in a balanced society.

In other words, in the current time of turbulences, sustainable policies are primarily directed towards economic growth, reducing unemployment and improving the people's standards of living.

As a member of the European Union, Romania acts towards the implementation of the principles of sustainable development, particularly at the national, regional and local level (cities, towns and villages).

Of course, our country also had so far a general economic development policy and less a policy of local development.

The performed research revealed that it is necessary to define and clarify the concept of overall development (national development), local development and sectoral development in order to avoid any interference that may have negative effects on those concepts.

Overall development is generally one of the government's functions that has the duty to establish investment objectives and investment policies for the sectors of the economy that can ensure economic growth and, on this basis, a sustainable development (overall fiscal

policy to stimulate investment, providing skilled labor, development of revenue-producing activities for which sources of raw materials and local skilled labor are ensured, providing general interest infrastructure (railways, highways, motorways). These objectives are financed from the state budget resources, as well as grants and reimbursable funds.

Local development is, in fact, the policy through which the local administration authorities conceive the specific objectives of their communities in order to meet the needs of the local people and to ensure financing for these objectives. Within local development, the targets are as follows: providing public services to the population, providing the local transport infrastructure, the water supply and sewerage network, the heat and gas supply networks, streets, sidewalks, parking lots, green spaces and leisure areas; providing and ensuring operation of the local health and education systems, the social assistance system, increasing the level of employment and community's standards of living, improving the habitat and the natural environment, etc.

In conclusion, from the above it results out that the local development differs fundamentally from the overall development, both in content and structure, but local development carried out in all localities finally ensures Romania's development and contributes directly to the improvement of the people's quality of life.

Sectoral development belongs to central level by making investment in important public sectors such as education, health, culture, stimulation of economic activity (mines, railway transportation).

Taking into account that the sectoral development is carried out by the central administration, it can interfere directly in the local development by building common objectives in the mentioned sectors (education, health, culture and infrastructure).

However, we need to say that in the local development field that was put in practice so far, there was a series of shortcomings with negative consequences in what concerned ensuring a continuous development of the local economy. The shortcomings consisted in: poor management; unrealistic view on the effects of the public investment; failure to providing financing resources or changing their destination during execution; unjustified high costs for achieving the objectives; inappropriate reflection of the financing and the development objectives in the local budget.

The regulations in force have also contributed to these shortcomings because they provide that an investment is an asset whose value exceeds the amount of 1,800 lei, without requiring the budget holders to provide objectives that can contribute to increasing the added value and objectives with an unproductive administrative nature.

Sustainable development must bring fundamental changes in the decision-making capacity of the local administration so that it can set development goals concerning particularly the meeting of the local population's needs and ensuring the necessary public funds.

We believe that, at present, at local level, it can no longer be about a "general" development because the experience of past 20 years shows that the policy that was put in practice did not bring the expected results, although significant amounts of money were allocated for this purpose.

Therefore, we believe that the concept of sustainable development is a practical tool by whose help the local public administration can proceed to ensure normal living conditions on a given territory.

The responsibility of the elected bodies is a feature of the sustainable development concerning their obligation to draw up targeted development projects in the fields of public

service, education, health, all of them being sectors which bring the people the most of the complaints.

In this context, an important role should rest to accounting. By means of the used techniques and tools, accounting will reflect, through specific financial indicators, the way the objectives are being achieved and the related costs. The provided information will be particularly important when becoming transparent, namely known and subject to analysis by the entire community.

2. Requirements of sustainable development at local level

In this paragraph, it is described the result of the research work on the implementation of the principles and rules of sustainable development at local administration level, taking into consideration the concepts and provisions of the international bodies and Romania's achievements in this field.

Sustainable development at local level aims at local economic prosperity and social welfare by creating a favorable business environment, along with the integration of vulnerable groups into the community, the use of endogenous resources, and the private sector development.

The local communities build, operate and maintain the economic, social and environmental infrastructure, supervise the planning process, establish policies regarding the environment and contribute to the implementation of national and regional plans.

The concept of local development concerns not only the local administration units, but also the units at intercommunity, interregional and even cross-border level. In the context of regional development, it is necessary to understand the place and role of the local development, partnership development and types of relationships at various administrative levels.

Particular attention was paid to corroborating the legislation about operating the local administration units (on the model of a capital city of a county) with the new concepts of sustainable development, especially as they have significant material, human, financial and natural resources, which can substantiate the development programs whose implementation will contribute to improving the civilization of the community members.

The experience acquired in the past 20 years of activity in a democratic system has revealed the fact that maintaining a high degree of decision-making at central level had a negative influence on the operation mechanisms of the local administration, thus the effects passing on all sectors (education, health, public order, etc.), as well as on people.

The modernization and decentralization process that begun in the past years creates the potential to widen and improve the local administration's functions and thus the local administration will have more possibilities to act in the interest of all citizens and of the whole community.

The analysis of the human and material potential existing in the local administration units has revealed that the implementation of the sustainable development principles will contribute to improving the civilization of the whole community. *The positive effects are to be felt as follows:*

improvement of education system; effective organization and functioning of health system; increase of the employment and standards of living in the community; decrease of the number of people who live below the poverty line; food, habitat and social environment

improvement; increase of air, water, soil and environment quality; protection and extension of green areas; waste storage and processing; improvement of public service quality; appropriate spatial planning policies; attraction of foreign investment and increase of autochthonous investment.

Consequently, local administration authorities have a duty to develop strategies to attract investment and especially to intensify their efforts to finance those objectives which are to the direct interest of the community.

For the local public administration, local decentralization will play an important role which will lead to welfare, because the public services will be carried out by the administrative level which is the closest one to the citizens.

This is confirmed by the European practice, where efforts have been directed towards the following objectives: most services of the public sector shall be provided by local public administration because this situation can offer great benefits at low cost to the population; government administration should only provide national services - defense, foreign policy - where local competences cannot be operational; local public administration should limit itself to services which the market cannot offer to the local community and for which the citizens pay taxes and local taxes; the economic development must be achieved in close contact with the decentralization; local public administration should reduce its operational costs; the benefits of a better political representation shall be made visible.

In order to support the sustainable development of all regions of the country, the local public administration authorities in Romania have promoted local development policies that included a series of measures, planned and promoted by central and local authorities in partnership with various private actors, public actors, volunteers with a view to ensuring a sustainable economic growth and improving the living conditions.

The country's social and economic development depends largely on the rational territorial organization of the local administration units. Thus, a relatively small number of development poles with economic and social power will be re-defined with a view to managing creatively and efficiently the local activities.

The competitive advantage of the development poles lies in: the existence of highly developed companies, universities, skilled labor, transportation infrastructure, production activities structure.

Developing cities - as centers of growth - can lead to a polycentric development of the Romanian territory. Thus, the objectives to be achieved are the following:

- increase of the economic and social role of the urban centers, through a polycentric approach in order to stimulate a balanced development of the regions;
- improving the accessibility of the regions and particularly the accessibility to urban centers and their links with the surrounding areas;
- improving the quality of the social infrastructure of the regions;
- improving the competitiveness of the regions as business locations;
- improving the contribution of tourism to the development of the regions.

All these objectives, that are reflected in policies and regulations issued by the central authorities, will determine the reduction of both the inter-regional disparities and those within regions, between urban and rural areas, between urban centers and adjacent areas, and in cities they will determine the reduction of the disparities between the areas which are attractive and unattractive to investors, through a better use of the regional synergies.

The balanced development of all regions of the country can be achieved through an integrated approach, based on a mix of public investment in the local infrastructure, active policies to stimulate the business activities and support to the capitalization of the local resources.

As an urban area is not a closed system, the achievement of the objectives is based on an efficient management leading to development by observing the principles included in basic documents on sustainable development (the Report "Sustainable European Cities", Brussels, 1996, the Statement of the Bremen in 1997, the Treaty of Amsterdam in 1997).

Among the objectives that these documents set, we are mentioning the following:

- sustainable development so that, on long-term, changes produce in terms of culture and attitude related to the resources that the population and companies use;
- reinforcing the institutional capacity through efficient management, defining and restructuring the public services according to the current financial resources, the objectives of the sustainable development and community's needs;
- connecting a community to certain networks with a view to exchanging information on the best practices between communities; implementing programs and projects in the framework of the public-private partnerships; carrying out the public investment that the private sector cannot accomplish;
- integrating horizontally the development policies in order to simultaneously achieve a synergistic effect between sectors - and integrating vertically the policies of the community with the regional policies; integrating the energy, material, financial and human resources flows into a natural cycle; using market mechanisms to achieve sustainability, that is issuing regulations on eco-taxes, functioning of public utilities as a market system, investment evaluation based on environmental criteria;
- decentralization of management in the energy sector; sustainable architecture design, by using green building materials.

The needs of the sustainable development include conditions for the local administration units because the legislation concerning their operation has been put in line with the European Charter on Local Self-Government.

Thus, local public administration law no. 215/2001 provides: "local autonomy is the right and the effective capacity of the local public administration authorities to solve and manage the public affairs, under the law, on behalf of and in the interest of the local communities they represent" (5).

In other words, at present, the local authorities are able to take autonomous decisions concerning the following: establishing and collecting the local taxes; land administration; setting up the budget of revenue and expenditure; prioritizing sustainable development of local community; public order; allocation of public services; making efficient the public and private activities of the territorial administrative unit .

Following the analysis of this issue, it has been noticed that in comparison with the necessary financing for the sustainable development, the local communities have not sufficient resources, which leads to call for transfers from the state budget, as broken down quotas and subsidies.

In this area, there is a malfunction with consequences on sustainable financing development that consists of: the elected local administration bodies have autonomy in setting the objectives for the sustainable development; the completion of the local financing resources for sustainable development - as broken-down quotas and subsidies, where appropriate - is

provided by central government through the county councils which might have political interests, and that leads finally to reducing the degree of autonomy.

In this specific field, there is a need of measures to correct these failures so that every community can have access to resources within the limits established by law and without any intervention of the political structures.

We believe that the local authorities have the necessary conditions for implementing sustainable development principles, but at this stage, a concentrated effort towards the training of their employees is needed, with a view to learning the mechanisms and policies to implement at territorial level.

3. Conclusions

Addressing the issues on a good basis of research and substantiation can be summarized as follows:

- Concerning the structure of the local authorities, we've made an analysis of the implementation of the sustainable development principle by highlighting the fact that, locally, it differs in structure and content from the overall development that is to be addressed at national level.
- Concerning the local sustainable development, we have brought my own contribution to a broader definition of sustainable development because my research work was conducted based on a model of a capital city of a county that provided us the appropriate information and arguments.
- We have identified local failures which may adversely affect the implementation of the sustainable development policies. It's about the existence of undue restrictions in the allocation of funds from the state budget, and that, in most cases, has a political tinge.
- Concretely, we outlined the requirements of sustainable development in Romania that consist mainly of a responsible management of the financial and human resources towards meeting the needs of the local people.

A good-result implementation of the policies concerning the sustainable development at local administration level is directly related to the existence of an appropriate accounting system adjusted to these requirements and that can provide data and information to substantiate the decisions locally.

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CONTEMPORARY TENDENCIES AND ASYMMETRIES IN THE E.U. UNEVEN ECONOMIC GROWTH AND GLOBAL GROWTH DIFFERENCES

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Being in the phase of searching for the best socio-economic recipe, Europe is facing two tendencies: economic revival and global growth differences. Both processes require subsequent management at a local, national and European level in order to reduce the socio-economic risks.

Facts, arrangements and decisions with European consequences are unreeling, currently, heavy and slow due to the lack of cohesion between the European and the national interest. Economic politics form a European level, on currently relevant economic crisis, have an impact on social changes exacerbated by the resources crisis and the environment's critical state.

The economic crisis's domino outcome overshadows the Europe's social and economic future, and will suffer. Currently, the conflict between national and community interest (trade and financial protectionism) generates tensions between European countries, creating "asymmetries regarding economic relaunch".

Economic performance implications on the social ones are the basis for "operating trilemma" of the European economy. Balancing the budget, reducing the economic inequalities, the increase in the employment level, initially formulated in the Lisbon treaty, remain, further on, in actuality regarding the relaunching the European economy.

Key terms: globalization, economic growth, financial protectionism, unequal development, economic relaunch.

1. - Uneven economic relaunch

The beginning of the year 2011 has been marked by the German and French efforts in obtaining the support from other Eurozone countries regarding the setting up of a pact to strengthen the economy's Eurozone⁵. The project established a series of measures regarding the improvement of competitiveness in the euro market to help fight the debt crisis. It is noted the special interest for restoring the functionality of the financial markets as an engine for economic relaunching. The proposed measures refer to objectives from the fiscal policies field, from the employment field and demographic policies⁶.

The two countries wish that the pact should be included in a complete ***package that should also include changes made to the European Financial Stability Fund***. The aim should be twofold: the increase in the funding capacity and increase in flexibility for the use of money.

⁵ EurActiv: 4th February 2011

⁶ Specifically it is about new limits on debt levels written by national laws, higher retirement age based on demographics, the elimination of wages indexed to inflation, a minimum income tax rate. Proposals have been rejected as devoid of attractiveness and interest for countries like Belgium, Austria, Ireland, Spain, Portugal and Poland who were against the new measures proposed by Germany and France characterizing them as difficult to accept.

In an exploratory period on policies for ending the crisis and economic relaunching, already uneven from a country to another, this test may exacerbate even more the internal tensions of the E.U. countries.

“**Competitiveness Pact**” proposed by Germany and France has been criticized, not being the right solution for economic crisis Eurozone⁷ because, in addition to the labor market issues and the correction of some difficulties at the money market level, there are other imbalances that affect the European market⁸.

In its original form, the Competitiveness Pact can be linked to a crisis program. Having in mind all these considerations, economists believe that the current *crisis is not a currency crisis but rather a crisis caused by the economic instability in certain parts of Europe*. We bring back to discussion the problem regarding the notable differences on development and growth, and also on the different ways of coping with the crisis, through national eco-social policies.

In order to reduce differences and create an economic upturn, the competitiveness pact proposes restoring confidence within the financial markets, by increasing the 440 billion euro allocated to the *rescue fund* destined to the Eurozone countries, with large external debts.

The “Pan-European” solution proposed by Germany seeks to make European Central Bank to focus exclusively on the monetary policy, acting with caution in regards of fiscal policy and launching sovereign bonds.

The question is asked: *Global economy governance may decide Europe’s future?*

The grounds and the continuity of the welfare state, have serious problems. The golden age of “welfare states” ended as unemployment, inflation, and globalization, lack of social protection measures were accumulated and put to test the European social model.

If the observed correlation, the European social model, economic prosperity, when the indicator GDP per capita is eloquent evidence that support the high economic performance and social performance standards of living.

A *regulatory* approach puts the analysis within the parameters of the Lisbon Treaty, while the positive approach encounters difficulties as jobs lead to market development, and therefore to economic growth. Emphasizing competition generates, yet, the social justice. So, how can it be ensured the compatibility between economic growth and social justice? Of course, thesis according to which, where there is equality there is no competitiveness has its degree of truth, and the businesses that are seeking economic growth, often, have to sacrifice the equality through economic policies that support competition. The reverse: where economic performance is missing there is poverty.

European Commissioner responsible for Economic and Monetary Affairs, Olli Rehn, said: that he expects for the GDP from the 17 countries from the Eurozone to increase by 1.6% in 2011. Under these circumstances, an increase in domestic demand it is expected, as a result of a more sustainable growth, while exports should contribute more to support the economic upturn.⁹

⁷ The initiative has been criticized also by former presidents of the European Commission Romano Prodi and Jacques Delors.

⁸ In essence, these measures relate to: raising the retirement age, strict budgetary controls, the harmonization of income taxes, a ban on wage indexation arrangements.

⁹ It is expected that the growth rates would be for Germany 2.4%, France 1.7%, Great Britain 2%, Italy 1.1%, Spain 0.8%. Regarding Romania’s output during the economic collapse, there were opinions according to which

The increase in oil prices (by 6,1% compared to 2010) related to the already existing inflationist pressure in the Eurozone could persuade the European Central Bank to abandon the very low level of the interest rate sooner than anticipated¹⁰.

In the same context, we can find Jose Manuel Barosso's opinion, according to which the biggest geopolitical event of the last decade, a true "rendez-vous" with history, is represented by the "Jasmine Revolutions" throughout the Arab world¹¹. The socio-economic effects will be felt in the whole world, fact that requires a new political parading for the Europe's relations with the surrounding southern.

the Government and IMF estimate, for this year, an economic growth of 1,5%. The national institute of statistics will present on 13th may the evolution of GDP in the first quarter of this year.

¹⁰ Euractiv 4 march 2011

¹¹ Euractiv 3 March 2011

2.- Agreed,...but better, not!

Formed in a landscape marked by the old order of the centralized control, the EU combines the socio-economic and political interests of nation-states in the competition with the world. The states' Europe doesn't mean the abolition of the European nations, but the different pace for development and economic growth are difficult to harmonize. The different economic dynamics has been transferred to the different political dynamics. Hence, the tension between the competing countries which have to deal with pressures from two directions. On the one hand the integration pressure and on the other the globalization pressure (through transnational organizations).

Caught between these two forces of integration- globalization, nation-states aspire further on to compliance with the national initiative law and to protecting the national interest.

Initiated as an intergovernmental forum for coordinating the national goals, the E.U. becomes presently, an area of influence of the Franc-German authorities, on the proposal package motivated by the crisis and the urgency of relaunching.

The meeting from Davos 2011¹², earlier this year, has occasioned a review of the main directions which the European economic policy is concerned about. Regarded as a *global evolution indicator summit for this year*, the meeting called into question the major European concerns as well as the global ones.

The erosion of the euro, the reduced potential for sustainable growth of developing countries, the erosion of the America's role in the world, devastating global warming, led delegations attention, who expressed their concerns for the European and planetary future.

Analyzing the situation of countries all over the globe, in the globalization context, new data has emerged regarding China's evolution as an emergent country with a very strong economic potential. The effects of development and economic growth in China would probably pass and be felt on global economy in matters like overcoming U.S.'s economy in the next 20 years¹³. Corresponding with data provided by the World Bank, China has a growth potential of 8% annually, being the 2nd biggest economic power of the world. In the past 10 years, China's economic growth was on average of 10% each year, with a GDP that exceeds the GDP of France, Germany, Great Britain and Japan.

If India and China exploit the comparative advantages by entering in force on the European and U.S. market, we find it necessary to update David Ricardo's theory on comparative advantage under the new conditions of globalization. However, the inflationist increase in energy price in India has become complicated with a potential food crisis. As a palliative measure, India could reduce custom duties¹⁴ by encouraging food imports.

Emerging countries (India and China, the biggest emerging economies in the world)¹⁵ have been the focus of Davos summit due to the exception of economic growth recorded even with the highest global recession in recent history.

Interpreting the measures of economic policy in time of crisis, China has managed to keep national currency constant against the US dollar. This wise decision helped China to counteract the competitive depreciation in the East Asia area, measure that contributed to the efficient economic upturn of the financial markets in the area.

¹² EurActiv 31 January 2011

¹³ Euractiv 23 March 2011

¹⁴ In January, the current year, food price inflation reached 15,575 in India, due to some large agricultural problems caused by climate change:

¹⁵ Thomas L.Friedman-,*The Earth is flat*”,Polirom publishing house 2007

At the same summit in Davos, there were mentioned the sovereign debts of developed countries. The opinion expressed was that they represent “*a time bomb for the global economy*” (especially in the E.U. and the U.S.). Chinese representatives have emphasized on this occasion, that Dagong Credit Rating warns on the danger of loss of the U.S. dollar stability as a global reserve currency, in the future¹⁶.

Regarding the economic recovery efforts, crediting some economies that are in a prolonged crisis (emergency funding for Ireland and Greece) raised the issue on reducing the interest rate. This will affect, however in a negative way, the European budget and the pace of economic recovery of the E.U.

3. Economic recovery in the Eurozone

The summit in Brussels on 24-25 March the current year brought into discussion the economic governance package. On this occasion it was decided to create *the Europlus Pact*, which by then was known as the Pact for Competitiveness.¹⁷ European Stability mechanism will be implemented from January 1st 2013, will become operational in June 2013 and will have as a goal ensuring the financial stability of the euro zone, replacing the current mechanism and supporting the Member States from the Eurozone which manifest severe funding problems.

Concerned about strengthening the security mechanism of the European single currency, EU pledged to ratify the amendment of the Treaty by the end of 2012. The total fund at the disposal of the mechanism will be of 700 billion euro, collected in five years from the entry into service of the mechanism. The main mechanisms to strengthen the protection package community currency envisage creating a permanent crisis fund (for emergency crediting) and measures to penalize nations that causes deficits exceeding the agreed limits, contributing to an increase in the economic European imbalance.

Appreciated as the main instrument in relaunching the European economy, the E.U. Budget for next year will focus on employment, economic governance and economic growth. E.U. Budget considered as being an investment budget includes a research projects carried out over several years and infrastructure works¹⁸. Other prospective goals in the E.U. 2020 strategy relate to employment, innovation, research and development, climate change and energy, education and social integration.

Of course, the socio political events (in the Arab world, from the beginning of this year) and the need for assistance and support for these countries may jeopardize the ability of the European budget for underfunding. Reduction of some budget funds intended for cohesion, citizenship and foreign affairs could jeopardize the effectiveness of actions and current programs in progress at a European level.

¹⁶ The emerging countries which hold large amount of U.S. government bonds are advised to reduce their purchases to avoid losses at the expense of their national interests. China is currently the largest holder of U.S. government bonds.

¹⁷ Romania was among the six states that have joined the Europlus Pact, arguing that imposing the tax level remains a national right

¹⁸ Year 2012 being the sixth year in the current "financial perspectives" (2007-2013), the Commission will present its formal proposal for the 2012 EU budget , on 20th April.

Prospects for Romania's exit from the economic collapse period, have resulted in views of the Government and IMF that have estimated a growth of 1, 5% this year¹⁹

Concerned about the debt problem, the recent summit in Brussels has given rise to the formulation of a comprehensive system of protection against debt crisis, including increased financial support fund for the euro zone. Portugal, Greece and Ireland require a temporary addition to the support fund (fund established last year).

Discussions on how to extend the fund were postponed until June this year, because this decision constitutes a huge effort for the European Community. Real lending capacity would have to be expanded from 250 million euros to 440 billion euros. In addition, establishing a permanent fund (permanent mechanism for stability) to support economies that are in economic trouble is to be established by mid-2013. New lending capacity will reach 500 billion euros, if the countries from the area will contribute with approximately 80 billion euro starting with mid-2013.

In addition to this assistance measure for the countries with recovery deficits, strengthening the budgetary policy at a European level seeks also other directions oriented toward operating "European pact" on promoting and supporting economic reforms and a fiscal policy convergence.

The process began as proposals from France and Germany, which were mentioned in the "**Compatibility pact**" (though, unsupported by the E.U. countries) and replaced by the "**Europlus Pact**" which reflects the efforts and searches from an E.U. perspective, so that the appropriate measures and strategies would reflect and contribute to overcome the crisis and to development.

¹⁹ The National Statistics Institute of statistics will present on May 13 the evolution of the GDP in the first quarter of this year.

INNOVATION VERSUS INCOME CONVERGENCE IN CENTRAL AND EASTERN EUROPE. IS THERE A CORRELATION?*

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The heterogeneity of response of the different economies facing the world economic crisis has brought into attention once again the issue of convergence inside the European Union. The high growth rates experienced by CEEC during the last decade created an optimistic view of rapid convergence towards Western Europe. But the crisis showed that the sources of economic growth in the region were not appropriate for a long run growth. Innovation is a key source of competitiveness and a contributor to a sustainable growth path. Even though CEEC lag behind other European countries in terms of R&D investment, a certain progress can be observed. The objective of the present paper is to establish if there is a correlation between the convergence in terms of GDP and the convergence in terms of innovation for the CEEC. Based on yearly Eurostat data for the period 1998-2008, we quantify the progress of each of the 10 CEEC both in closing the income gap and the innovation gap. We then rank the countries according to their speed of convergence and perform a Spearman rank correlation analysis. The results show that, on average, convergence in R&D is not correlated with convergence in GDP. The Czech Republic is the only country with a positive correlation between R&D intensity and GDP growth. Bulgaria, Hungary and Slovakia show a negative relationship between investment in R&D and economic growth. This implies that for most of the countries in Central and Eastern Europe, economic growth during the period 1998-2008 was mostly driven by non-innovation factors.

Key words: convergence, growth, innovation, R&D

JEL codes: F43, O33, O47

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1. Introduction

All central and eastern European countries have faced a recession period after the fall of the socialist regime, followed by a return to positive growth rates in the mid and late nineties. Some countries have found the growth path relatively fast, during the early nineties, while others (like Romania, Bulgaria) have experienced long recession periods and reached a dynamic growth only starting from 1997-1998.

Economic growth during the transition period had a particular pattern in CEEC. Capital has provided a certain positive contribution to growth, while labor had a small or even negative contribution (IMF, 2006). In this respect, CEEC stand out among other emerging countries, where labor input has typically contributed substantially to growth. Most of the growth

during the transition period was actually accounted by the increase in total factor productivity (TFP). Even though the classical source of TFP growth is technical progress and innovation, growth during transition was mostly explained by efficiency improvements in the use of capital and labor (Havrylyshyn, 2001).

Starting in the late nineties, CEEC experienced a return to the classical factors determining growth, with an increase importance for innovation and technical progress. Once the transition period completed, the growth process in CEEC should be sustained by factors like capital intensity, innovation, human capital and competition (OECD, 2003). Since the main source of productivity growth during transition was actually the decrease in employment and only to a small extent the faster increase in output (Van Ark and Piatkowski, 2004), the post-transition period calls for new and sustainable sources of long term productivity increase.

In this context, investment in research and development (R&D) becomes an important component of the competitiveness of CEEC, not only in terms of creation of new technology, but mostly as a determinant of the absorptive capacity. Local innovation and creation of new technologies becomes complementary to the transfer of innovation created abroad (Mitra, 2008). Since CEEC are rather technology using rather than technology generating (Radošević 2005, Arnold et al. 2000), this second aspect may become the most important feature of the role of R&D as a factor of economic growth in Central and Eastern Europe.

The inclusion of innovation and research and development as determinants for economic growth is supported both by theoretical growth models and empirical research. Neoclassical theory Solow (1957) puts technical progress in the heart of long term growth, but states its exogenous nature. Endogenous growth models like Romer (1990), Grossman and Helpman (1991) are searching for the sources of technical progress and find innovation to be a solution to diminishing returns of classical factors. The “new growth theory” argues that R&D investment can foster long run economic growth. The interest of policy makers in the role of R&D is all the more important when considering the social rate of return, which surpasses the private rate of return of companies undergoing innovation activities (Griliches 1992).

The objective of this paper is establish if there is a correlation between the convergence process of CEEC towards the knowledge based economy and the income convergence of GDP/capita. We would normally expect a positive relationship between the two evolutions, since R&D investment is considered to be a determinant factor of economic growth. We first construct two rankings and compute a rank correlation coefficient, which turns out to be statistically insignificant, due to the heterogeneity of the countries in the sample. We then proceed with an individual analysis, which confirms the different patterns exhibited by the CEEC in the R&D-economic growth relationship. The Czech Republic is the only country where R&D intensity is correlated with economic growth, while most of the countries show in inconclusive relationship.

The structure of the paper is as follows. Section 2 presents a descriptive analysis of the convergence process in CEEC, with emphasis on research and development. This allows us to identify specific patterns in the relationship R&D – economic growth. Section 3 presents the methodology and the data being used, as well as the results obtained. Section 4 outlines the policy implications and the main conclusions of the paper.

2. GDP and R&D convergence in CEEC

There has been little research on the determinants of growth for the Central and Eastern European countries in the post-transition period, even less including research and development or human capital. One important reason for little research at macroeconomic level is poor data quality and availability for these countries, which makes econometric applications very sensitive and often leads to inconclusive results. Another reason might be the fact that the low volume of R&D investment seemed insufficient to generate a significant effect on economic growth. Indeed, during the nineties, the increase in productivity was actually accompanied by a decrease in R&D investment, so growth was generated by non-R&D factors (Radosevic, 2005).

The process of income convergence between CEEC and the European Union is clearly taking place, but with various speeds and different enhancing factors (Daianu, 2002). On average, CEEC reduced their income gap from 52% to 36% during the period 1998-2008 (see Table 1). The evolutions seem to follow a β convergence pattern, meaning that countries that were the least developed experienced a rapid growth (the Baltic states), while more advanced countries like Slovenia or the Czech Republic were progressing more slower (Veugelers and Mrak 2009).

It is well known that CEEC do not yet produce fundamental innovation, but rather adapt existing technologies transferred from abroad (Verspagen, 2001). Both human capital and effort in R&D can substantially facilitate the effectiveness of this transfer and the capacity of the receiving economy to implement such innovation created abroad (Griffith *et al.*, 2004; Aghion and Howitt, 2005). At a first glance, CEEC seem to have an advantage in this matter, having inherited solid R&D and education systems from their socialist past. Unfortunately, R&D is still oriented towards fundamental rather than applied research, making cooperation between universities and enterprises rather rare. Therefore, the R&D process has a relatively low efficiency due to the difficulty in transposing the R&D effort into an increase in productivity (Radosevic, 2005).

If convergence of CEEC towards EU27 in terms of GDP/capita is progressively taking place, catching-up in terms of knowledge economy is much more slow (Aralica et al. 2009). There are even opinions stating that a convergence towards a given target, as it was the case with the Lisbon agenda, is not suitable for all member states (van Pottelsberghe de la Potterie 2008). Even though a certain increase in R&D intensity can be observed, the differences compared to the European average remain significant. Table 1 presents these differences in R&D intensity and calculates the gap between CEEC and EU27, both in terms of R&D and GDP/capita.

Table 1. R&D intensity in CEEC and the catching up process, 1998-2008

		1998	2000	2004	2005	2006	2007	2008
EU27	R&D intensity	1.79	1.86	1.83	1.82	1.85	1.85	1.92
	St. dev.	60%	63%	67%	65%	63%	62%	61%
CEE C	R&D intensity	0.72	0.72	0.75	0.80	0.87	0.85	0.89
	St. dev.	42%	46%	47%	47%	49%	48%	49%
Gap in R&D intensity		60%	61%	59%	56%	53%	54%	53%

Gap in GDP/capita	52%	52%	45%	43%	41%	38%	36%
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Source: Own calculations based on Eurostat data. The gap represents the difference in R&D intensity, as a percentage of EU27. We define R&D intensity as the share of total R&D expenditure in GDP.

With an average share of R&D expenditures in GDP well below 1%, CEEC obviously lag behind the other members of the EU, having an R&D intensity below what might be expected given their income level (Radosevic, 2005). The gap in R&D intensity is decreasing over time, but the speed of convergence is fairly small. From a gap of 60% in 1998, CEEC have only managed to reduce the gap to 53% by 2008, so the difference remains remarkably high.

Both the level of R&D intensity and its dynamics present considerable variation between EU countries, and this variation seems to have increased over time. Table 2 presents the convergence status of R&D intensity for each of the 10 CEEC, depicting a heterogeneous behavior among these economies.

Table 2. The gap in R&D intensity between CEEC and EU27

	1998	2008	Average yearly evolution of R&D gap	Convergence status towards EU27
Bulgaria	68%	76%	0.7%	No convergence
Czech Republic	36%	23%	-1.2%	Convergence
Estonia	68%	33%	-3.5%	High convergence
Latvia	78%	68%	-0.9%	Low Convergence
Lithuania	70%	58%	-1.1%	Convergence
Hungary	63%	48%	-1.5%	Convergence
Poland	63%	69%	0.6%	No convergence
Romania	73%	70%	-0.3%	Low convergence
Slovenia	25%	14%	-1.1%	Convergence
Slovakia	56%	76%	1.9%	No convergence

Note: The gap represents the difference in R&D intensity between each of the countries and EU27, as a percentage of EU27.

Inside the CEE group, several patterns emerge. A sub-group of countries present no-convergence in terms of R&D during the period 1998-2008: (Bulgaria, Poland and Slovakia), with a clear divergence in the case of Slovakia. The second sub-group presents a decrease of their gap towards EU average (Estonia, Czech Republic, the Baltic States, Hungary, Romania and Slovenia). Romania and Slovenia present a low, but positive, speed of convergence. The difficulty in R&D intensity convergence could be explained by the fact that for countries with high rates of GDP growth, as CEEC, R&D expenditure as % of GDP needs to grow at very high rates in order to close the gap (Veugelers and Mrak 2009).

3. Research methodology, data and results

We have established in the previous section that both income and R&D convergence is taking place in CEEC, but at fairly different speeds. The research question we address is the

existence of a correlation between the two convergence processes. If such a correlation is to exist, then R&D can be considered an enhancing factor for economic growth.

We construct two rankings of the 10 CEEC according to their speed in closing the GDP gap and the R&D intensity gap. We then test the correlation between the two rankings by using the Spearman rank correlation coefficient. The formula used to compute the coefficient is the following:

$$\rho = 1 - \frac{6 \sum_{i=1}^n (x_i - y_i)^2}{n(n^2 - 1)}$$

Where:

- x_i and y_i are the ranks occupied by country i in GDP convergence ranking and R&D convergence ranking respectively.

- n represents the total number of countries, in our case 10.

The Spearman correlation coefficient is a non-parametric measure similar to a Pearson correlation coefficient between ranked variables, without making the assumption that the variables are extracted from a normal distribution. The advantage over the Pearson coefficient is that it does not require a linear relationship between the two variables. A coefficient equal to zero shows no correlation between the two rankings. A coefficient equal to 1 implies that an increase in R&D intensity is always accompanied by an increase in GDP. A positive, but less than 1, coefficient would imply that GDP tends to increase when R&D intensity increases. Equally as important as the value of the coefficient is its significance level. Since the Spearman coefficient does not assume a specific distribution, the significance value is obtained based on a table of critical values, provided by Best and Roberts (1975). After running an overall analysis based on the sample of 10 CEEC, we proceed by depicting individual correlation analysis between growth and R&D intensity for each of the countries.

The data we used comes from Eurostat, has a yearly frequency and is available for the period 1998-2008. For the construction of the rankings, we used GDP/capita expressed in purchasing power standards and R&D intensity computed as the share of total R&D expenditures in GDP. We then calculated the gaps in GDP/capita and R&D intensity as a percentage of EU27. The same series were used to compute the individual correlation coefficients.

Based on the analysis presented in section 2, we constructed a ranking of the countries according to their speed in reducing the R&D intensity gap. Data is presented in column (1) of Table 3. Estonia, Hungary and the Czech Republic present the fastest convergence of R&D intensity towards European average. Poland, Bulgaria and Slovakia occupy the last ranks, presenting, as described above, a divergence process in R&D investment.

We added a ranking in terms of income convergence in order to see whether there is a correlation between the two rankings (column 2 of Table 3). In terms of increase in GDP/capita, the Baltic countries are the top runners. They have started with relatively high income gap, but manage to reduce it by more than 20 percentage points in 10 years. Countries that occupy the last ranks are actually those who had a smaller gap from the beginning (i.e. Slovenia and the Czech Republic had only 20-30% gap in 1998). So this is a

confirmation of the hypothesis of β convergence, according to which countries with larger gaps converge faster than countries with smaller gaps.

Table 3. Correlation analysis between GDP/capita and R&D convergence

Countries	Ranking by R&D convergence	Ranking by GDP convergence	Individual correlation between GDP growth and R&D intensity
	(1)	(2)	(3)
Estonia	1	1	-0.34 (0.2989)
Hungary	2	9	-0.56** (0.0722)
Czech Republic	3	8	0.77*** (0.0059)
Lithuania	4	2	0.50 (0.1209)
Slovenia	5	7	0.18 (0.6016)
Latvia	6	3	0.15 (0.6521)
Romania	7	4	0.12 (0.7356)
Poland	8	10	-0.03 (0.9338)
Bulgaria	9	6	-0.61** (0.0476)
Slovakia	10	5	-0.70** (0.0174)
Spearman rank correlation		0.163	
Significance (p-value)		0.65	

Source : Authors' calculations based on Eurostat data, using the STATA software. The first two columns contain rankings of the 10 CEEC according to the reduction in their income and R&D gap, for the period 1998-2008. Column (3) presents the individual correlation coefficients between GDP growth and R&D intensity, with the corresponding p-values in brackets. The symbols *, ** and *** indicate significance levels of 10%, 5% and 1% respectively.

The Spearman rank coefficient has a value of 0.163, showing a low positive correlation, which in turn is not statistically significant (p-value = 0.65). We cannot therefore establish a significant correlation between the two rankings, meaning that an increase in R&D intensity is not systematically accompanied by an increase in GDP. Even though on the long run both convergence processes are taking place, GDP convergence does not seem to be correlated with R&D convergence. This lack of correlation is due to other factors determining growth, which generate the observed differences in the speed of convergence. The result does not imply that R&D does not have a positive contribution to growth, but it states that, on average, investment in R&D does not speed up the process of income convergence. The

present levels of R&D intensity are not sufficient to generate a visible increase in GDP, so its relative importance seems to be much lower than for other determinants of growth.

We proceeded with an individual analysis of economic growth versus R&D intensity for the 10 countries, during the period 1998-2008. We performed an individual correlation analysis, in order to identify if the countries follow a similar path. Results are presented in column (3) of Table 3. We found that the average evolution depicted earlier hides heterogeneous patterns.

Hungary, Bulgaria and Slovakia show a negative correlation between economic growth and R&D intensity. While they were progressing in economic growth, they allocated less of their income to R&D expenditure. So growth seems to have been decoupled from R&D expenditure in these countries. One possible explanation resides in the sources of innovation. Some countries might create it locally by investment in R&D, while others might import it by foreign trade or foreign direct investment (Perugini et al. 2008, Narula 2009). Slovakia actually experienced a severe drop in all R&D components during this period and is a particular case of growth without R&D investment.

The Czech Republic is the only one of the ten countries presenting a highly significant positive correlation. Being one of the more advanced CEEC, the Czech economy has settled on the more classical factors of long term economic growth, like innovation and human capital investment. (Perugini et al., 2008). Its constant increase in R&D expenditure was accompanied by sustained GDP growth.

The other six countries show a rather insignificant correlation between GDP growth and R&D intensity, given by high p-values associated with their coefficients. Though the R&D intensity in these countries has continuously increased during this period, they have not yet reached the point of transforming this effort into an increase of output. They still suffer from weak R&D systems, which make cooperation between academia and industry sectors difficult (Radosevic 2004, 2005). Estonia stands out being on the first position in both rankings and showing a considerable progress along the convergence path. Slovenia also visibly increased its R&D expenditure, so a positive and significant contribution to growth is expected in the future. The Baltic States, although not presenting yet a significant correlation, have a high potential in innovation driven growth, because of their constant increase in R&D expenditure.

Our research has several limitations. First, the Pearson correlation coefficient assumes a linear relationship between the two variables. The lack of linear correlation does not exclude non-linear forms of correlation, like an exponential one, which may account for continuous R&D investment with a later effect on growth. Second, a correlation between two variables does not mean a causality relationship, even though theory suggests that R&D should act as a cause in economic growth. For the case of CEEC, a hypothesis that higher income levels lead to an increase of R&D investment may very well be plausible. These limitations open the field for future research: including R&D in a cross-country growth regression and testing the nature of the causal relationship.

4. Conclusion

As a general conclusion, CEEC present a heterogeneous pattern in the path towards the knowledge based economy, though a small but positive trend in R&D intensity can be identified. Bulgaria, Poland and Slovakia seem to make an exception to the rule, reducing their share of R&D and therefore magnifying their gap with the European Union. On the other hand, Estonia shows a remarkable progress both in innovation and income levels, being the top runner among CEEC.

In the post-transition period, CEEC are in search of sustainable factors to increase productivity and foster long-term growth. The crisis has particularly affected these catching-up economies, and the recovery path is likely to be more knowledge-based. Innovation and research and development could be important contributors to sustain the competitiveness of these countries and the re-adjustment of the catching-up process. The aim of this paper was to test whether the income convergence in Central and Eastern Europe was correlated with the increase in R&D intensity. We constructed two rankings of the 10 countries according to the status of convergence (income and innovation) and computed a Spearman rank correlation coefficient. The result shows a slightly positive, but insignificant correlation between the two evolutions. Suspecting high heterogeneity among the sample, we proceed with an individual analysis. The Czech Republic is the only country where the two evolutions are positively and significantly related. Hungary, Bulgaria and Slovakia show a negative relationship between economic growth and R&D intensity, which is consistent with the view that growth was mostly generated by non-R&D factors. The other six countries in the sample do not present a significant correlation between the two variables. The results indicate that for the majority of the new member states, the income convergence is not supported by innovation-convergence.

These differences in the innovation capacity point out to two different factors: differences in the stocks of capital, labour and knowledge, but mostly different efficiency of the innovation systems. This means that besides the effort put into R&D, the economies should also have the capacity to transform knowledge into growth. This is thought to be one of the weak points of CEEC. The structure of their research systems in favor of government and education sectors renders business applications difficult. R&D activities also need a certain maturation time to generate an increase in productivity, which CEEC have probably not reached yet.

As policy recommendations, countries with large gaps in terms of innovation (Bulgaria, Slovakia, Romania, Latvia, Poland, Lithuania) should focus on improving their absorptive capacity rather than investing high shares in fundamental research through government and academic systems. The challenge they are facing is to create an innovation demand from private companies, who do not find profitable opportunities for innovative activities. They should also improve their educational systems, which struggle with low efficiency. Despite high enrollment rates, there is a lack of correlation with the needs of the private sector.

Countries with smaller gaps, like the Czech Republic, Slovenia and Estonia, should concentrate on local innovations to sustain productivity growth and stimulate applied business research. Even though they are investing in R&D, they have difficulties in leveraging this effort into an increase of output. Government policies should facilitate cooperation between academia and private sector and increased government R&D spending should have a stimulating role on business innovation activities.

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REGULATORY BENCHMARKING IN CENTRAL EUROPE: CURRENT PRACTICE AND POSSIBILITIES OF DEVELOPMENT FOR THE ENERGY SECTOR

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Benchmarking is a technique of performance evaluation in which comparisons are made to benchmarks that represent external performance standards. In the field of regulation of public utilities, benchmarking can be used as an element of performance-based regulation or as a pure regulatory method, called yardstick competition. In the absence of competition, benchmarking can be used to simulate competitive pressures by comparing a regulated firm's performance against an efficient standard.

The aim of this paper is to examine the Central European regulatory benchmarking practices in the energy sector, namely the electricity and natural gas distribution industries, and to analyse the possibilities of further development of regulatory benchmarking in this region. The countries onto which we focus are Czech Republic, Slovakia, Hungary, Poland, Germany, Austria and Switzerland. In the region of Central Europe there are still significant differences between countries, especially in terms of experiences in modern regulation, regulatory methods and practices, level of economic development etc. Differences are considerable especially between Western countries (Germany, Austria and Switzerland) and the countries of former Eastern Bloc (Czech Republic, Slovakia, Hungary and Poland). As a result, the degree of the use of regulatory benchmarking is also very diverse within this region.

In the first part of the paper, we develop basic theoretic concepts of economic regulation. Then we describe the most frequently used regulatory methods – cost-of-service regulation, incentive regulation and yardstick competition – and we deal with common regulatory benchmarking techniques, describe their principles and main challenges. Subsequently, we provide an overview of regulatory methods and benchmarking practices for each country in the region of interest. In the final part of the paper, we analyse the challenges and possibilities for further development of regulatory benchmarking in the Central Europe.

We have found that except for Switzerland, all Central European regulatory regimes are based on some form of incentive regulation. The most sophisticated methods of benchmarking are used in Germany and Austria. In these countries, benchmarking is used in both electricity and natural gas industries. The Polish regulator is using a benchmarking method in cost efficiency analysis in electricity distribution. In Hungary, a specific method of benchmarking is used. In Switzerland, no benchmarking is used at present. In Czech Republic and Slovakia, some principles of benchmarking are adopted, but not directly to the revenue requirements setting. We summarize that the possibilities for development of regulatory benchmarking in the Central Europe could be extended by reducing market concentration, unbundling large vertically integrated companies, establishing a closer cooperation with the private sector and closer harmonization of regulatory frameworks.

Keywords: regulatory benchmarking, public utilities benchmarking, Central European utilities, public utilities regulation, regulatory framework
JEL Codes: L43, L51, L9

1. Introduction

Energy sector, which traditionally includes electricity, gas and heat industry, has some inherent characteristics which result in state regulation of energy utilities. Contemporary trends, such as privatisation, mergers, legal unbundling, separation of competitive and non-competitive segments produce new challenges for regulation in Europe. The main purpose of economic regulation is to achieve competitive results in an environment where competition is (for various reasons) not feasible.

An efficient competition puts a company under pressures, sometimes referred to as „carrot and stick“. The carrot means that if a firm produces at lower costs than its competitors, then its profits will be higher. The stick means that an inability to keep costs below its competitors will make the firm go out of business in long term. Regulatory commissions, willing to achieve maximum efficiency, therefore face the challenge to simulate competitive pressures, which should induce a company to behave as if it were exposed to real competition. However, traditional methods of regulation do not provide sufficient incentives for utilities to increase productivity in a quest for lower costs.

Regulatory benchmarking is an element of incentive regulation that can be used to set efficiency requirements based on a relative efficiency assessment. This paper examines the actual practice in central Europe (ie Czech Republic, Slovakia, Hungary, Poland, Germany, Austria and Switzerland) and possibilities of improvement in the field of regulatory benchmarking within this region.

2. Basic concepts of economic regulation

Regulation usually takes place when (Phillips, 1993)

- competition is feasible but does not last long, so a competitive output is not achievable;
- competition is feasible but a competitive output is not achievable due to market imperfections;
- competition is feasible and a competitive output is achievable, but with regard to the social welfare this output is not sufficient.

Usually, regulated companies have characteristics of natural monopolies, although not all of them (eg trucking in the United States). Market conditions are constantly changing – new technologies are being developed, market size is changing – so a demise of natural monopoly is almost never excluded.

Public utilities often have the following properties (Bonbright, 1961):

- inherent economies of scale and scope;
- essential product with a low price and cross elasticity of demand;
- capital-intensive production, the product represents an essential input for other industries of the entire economy;
- non-storable and non-transferable product, synchronous production and consumption, excess capacity, fixed connection with customers;
- variable and seasonal character of demand;
- obligation to serve all customers who are able and willing to pay for the service (public service obligation).

Following the concepts of natural monopoly or destructive competition (Kahn, 1988) or for social reasons, government may decide to regulate price level, quality-of-service, market entry and exit conditions and impose public service obligations.

This paper focuses on price (tariff) regulation. The main task of regulatory agencies is to set a price level that mimics the competitive price level. However, when competition is not feasible, this is a formidable task. The situation of natural monopoly tariff setting is illustrated below.

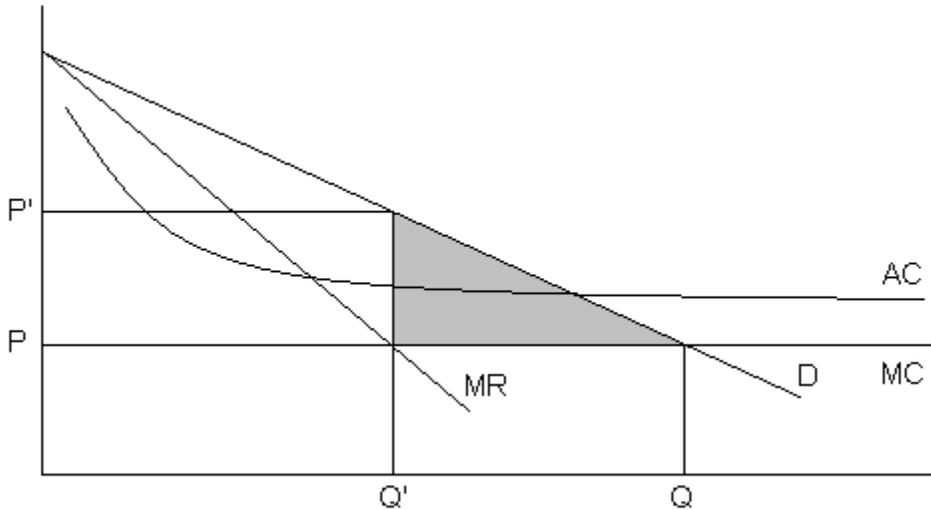


Figure 1: The concept of natural monopoly

Source: Lesser, A., Giacchino, L. Fundamentals of Energy Regulation. Vienna, Public Utility Reports, 2009.

In conditions of natural monopoly, the curve of average costs (AC) is decreasing due to the economies of scale. Monopoly power causes that the marginal revenues curve (MR) has a lower slope than the demand curve (D). The competitive output (Q) and price (P) is achieved at the intersect of demand (D) and marginal costs (MC). However, if the price was set at P, total revenues ($P \times Q$) would not cover total costs ($AC \times Q$) and the company would eventually go out of business. The task of regulators is to achieve competitive output and to allow the regulated company to cover its costs and achieve a reasonable rate of return on its capital.

3. Basic methods of tariff regulation

Traditional tariff setting is based on revenue requirements (RR) that should allow a company to cover its expenses and have a reasonable rate of return on its invested capital. Eligible expenses must be „prudent“, „known and measurable“ and „used and useful“ (Lesser, 2009). All other expenses are excluded from revenue requirements.

Usually, revenue requirements for a regulatory period (typically 5 years) are calculated using the following formula (Lesser, 2009):

$$RR = O\&M + A\&G + T + D + (WACC \times RB), \quad (1)$$

where RR denotes revenue requirements, $O\&M$ denotes operation and maintenance costs, $A\&G$ denotes administration and general costs, T denotes taxes, D denotes depreciation and amortization, $WACC$ is the weighted average cost of capital (after taxes) and RB denotes regulatory asset base (sum of assets book value and working capital).

A classical **cost-of-service regulation** (COS regulation) is based on summing eligible expenses and calculating a required rate of return. This approach has several disadvantages – information asymmetries between regulator and regulated companies, incentive to overinvest (A-J-W effect) or to invest imprudently (gold plating) – and does not simulate competition pressures, especially the above-mentioned „stick“.

The aim of **incentive regulation** (performance-based regulation, PBR regulation) is to reduce the impact of information asymmetries and to provide a stronger incentive for a company to reduce its costs. Usually, it is based on a price cap or a revenue cap. For each year, the regulatory agency limits the price level or revenues. The regulated company is motivated to reduce its costs in order to increase profits. The revenues are capped according to the inflation rate (RPI-factor) and efficiency factor (X-factor), that's why this method is also called RPI-X regulation. However, if the cap is set also according to a company's own costs, then the negative effects of COS regulation (overinvestment, gold plating etc.) are not fully eliminated.

In a competitive environment, a firm's earnings are related to the industry average and to the firm's relative market position. A firm has to reduce its costs below its competitors in order to survive. Setting the cap with respect to the performance of other companies is the main principle of the third regulatory method, **yardstick competition**, which is based entirely on regulatory benchmarking.

4. Regulatory benchmarking

The idea of regulatory benchmarking is that a firm's revenue requirements should not be based on its own costs, but rather on a relative efficiency measurement (Schleifer, 1985). The objective of benchmarking is to establish a system that determines a firm's efficient revenue requirements based on measuring a firm's efficiency against a reference performance. If correctly applied, this approach eliminates the negative consequences of information asymmetries. Regulatory benchmarking can be used to determine both price and quality efficient levels.

However, some issues arise when applying this approach. Firstly, regulatory agencies have to choose an adequate sample of firms, but firms and their environment tend to be heterogeneous. Difficulties also arise in gathering and comparing data. Thirdly, modelling can become more and more costly and marginal benefits of more accurate price setting can be overwhelmed by marginal costs of doing so. Fourthly, regulated firms could agree to act in some collusive fashion and to manipulate with data together. Fifthly, a threat of going out of business has to be credible, but governments usually tend to protect utilities from bankruptcy (Lesser, 2009). Sixthly, adequate methods have to be chosen.

A utility's performance can be measured in three basic areas: quality, efficiency and productivity. Productivity is measured as a ratio of output and input. These indices can be based on partial indicators (labour, costs etc) or total factor productivity (TFP), but issues resulting from heterogeneity prevail.

In regulatory practice, frontier methods for estimating efficiency are the most widely used. Cost frontiers define minimum cost level of producing a given output with a given input. Inefficiency is then represented as the distance of a company from this frontier.

Deterministic methods (OLS, COLS, MOLS) assume that all data can be observed. OLS (ordinary least squares) is a classical technique of estimating cost frontiers: it is an estimate of an average cost function of a sample of firms based on the relationship between total costs and other variables (market conditions, area, grid length etc). Statistical analysis can be used to isolate the impact of specific conditions. This method can be used in the case of companies with relatively similar cost structure and requires large data sets to obtain reliable results. COLS (corrected OLS) is a modification of OLS, with a shift of the frontier towards the best performing company. MOLS (modified OLS) is less restrictive than COLS with a slighter shift of the cost frontier.

Stochastic methods (stochastic frontier analysis, SFA) take into account possible measurement errors and chance factors. An estimate of noise distribution has to be made for each observed firm. Typically, higher efficiency scores are achieved than when using deterministic methods.

Data envelopment analysis (DEA) is a method in operations research. It is based on comparison of multiple variables (costs per customer, costs per km of grid etc), searching for points with the lowest unit costs and connecting these points to form an efficiency frontier. Companies not on the frontier are considered inefficient. As with above-mentioned methods, inefficiency is represented by the distance of a company from the frontier.

5. Benchmarking in the Central Europe: an overview

In this paper, we focus on regulatory benchmarking practices in following countries: Czech Republic, Slovakia, Hungary, Poland, Austria, Germany and Switzerland.

Czech republic

The Czech energy regulatory agency (Energetický regulační úřad, ERÚ) is using a revenue-cap incentive regulation. To determine revenue requirements, an ordinary RPI-X regulatory formula has been used, where certain parameters (WACC, D/E ratio, beta coefficient) and X-factor were determined using simple benchmarking methods. As the Czech energy market is relatively small, foreign experiences have been used. For example, the beta coefficient was set as an average of comparable European firm's beta from abroad. However, revenue requirements are being set based on a firm's own costs, which causes that issues of traditional regulatory methods are not eliminated. No true regulatory benchmarking was used (ERÚ, 2009). The number of firms operating on regulated markets is relatively low.

Slovakia

The Slovak energy market is regulated by the Agency for regulation of network industries (Úrad pre reguláciu sieťových odvetví, ÚRSO). Price regulation is based on a traditional price-cap incentive regulation. Prices are set individually according to regulatory formula which takes into account price inflation and X-factor (ÚRSO, 2008). The formula and its parameter setting are very similar to the Czech ones. No true regulatory benchmarking was used. The regulated markets are very concentrated, for instance, only one pipeline

(Slovenský plynárenský priemysel) is operating in natural gas regional distribution. The price caps in gas transportation and gas storage are based on comparing Slovak tariffs with EU tariffs (ÚRSO, 2009). The analysis has to take into account only similar European firms, with regard to geological, technical and other (working capacity, injection rate and production capacity) characteristics.

Hungary

Similarly to the Slovak ÚRSO agency, the Hungarian energy regulatory agency (Magyar Energetikai Hivatal, MEH) is using a price-cap RPI-X incentive regulation for the electricity sector. Unlike ERÚ and ÚRSO, MEH calculates regulatory formula parameters (beta, WACC etc) based on Hungarian local conditions, such as BUX stock exchange index and companies stocks (MEH, 2009). D/E ratio is determined using domestic benchmarking. In the field of natural gas and electricity transportation and distribution, a relatively complicated but promising non-frontier benchmarking system has been used to determine allowed operational costs. Before benchmarking, costs were corrected in order to mitigate regional differences (wages, consumer structure) and geographical and technical differences. Average (benchmark) operational costs were then incorporated into revenue requirements. Both international and domestic data have been used (Haney, 2009). A simple frontier technique has been used in setting quality requirements, where desired quality performance has been calculated from average values over a short period. Failure to comply with these standards was penalized, although there was a 5% tolerance in order to mitigate chance factors (Tersztyanszky, 2005).

Poland

The Polish energy market is regulated by the agency Urząd Regulacji Energetyki (URE), but rules of tariff setting are determined by the Ministry of Economy (Ministerstwo Gospodarki). A price-cap RPI-X incentive regulation has been used. As the Polish energy market is relatively large, benchmarking methods are more easily applicable. However, there are only a relatively few companies operating on the market, with regard to the total country area and population. Benchmarking has been used only in the field of electricity distribution. Electricity transmission and gas transportation and distribution are not regulated using benchmarking techniques.

As benchmarking technique, a Bayesian random effect model (a SFA method) in cost efficiency analysis was used. A DEA or COLS methods are in consideration for the next regulatory period (Haney, 2009).

Germany

The German energy market is significantly larger (in terms of system operators) than the above-mentioned markets. It is regulated by Bundesnetz-agentur (BNetzA). A revenue-cap RPI-X regulation has been used since 2009. BNetzA uses a regulatory formula which contains a general and an individual X-factor. The individual X-factor is determined using benchmarking DEA and SFA methods for both electricity and gas industries. The two methods are applied to two cost bases and a „best-of-four“ scheme is then applied: out of four results, the efficiency score that is the most favourable to a company is taken to calculate its individual X-factor. A total controllable expenditures (totex) benchmarking has

been used, in contrast with UK, where operational costs (opex) and capital costs (capex) are treated separately.

After benchmarking, an intransparency has remained, so legal steps by many operators have been undetaken.

Austria

The Austrian regulatory agency Energie-Control (E-Control) is using benchmarking methods for both electricity and gas industries. As in Germany, the Austrian energy markets is much less concentrated than in other previously mentioned countries and there is a large number of system operators in the market. Domestic and international data have been used for regulatory benchmarking. As in Germany, total expenditures (totex) are taken into consideration. The regulator has been using DEA and MOLS methods. DEA and MOLS give different results, which are then weighted using a „weak-of-method“: the better results gets weighted by 60%, the worse result by 40%. Contrarily to Germany, benchmarking results were widely accepted by regulated companies.

Switzerland

Having only a short history of regulation, the Swiss energy regulatory framework is carried out by multiple institutions – for example the ElCom regulatory agency, the association of companies operation in the electricity sector - Verband Schweizerischer Elektrizitätsunternehmen (VSE), Bundesamt für Energie (BFE) and more.

As natural gas plays only a minor role in the Swiss energy industry, tariffs in the gas sector are not specifically regulated, but they must comply to the national antitrust law. Tariffs for electricity distribution have been regulated based on a rate-of-return (COS) method. The methodology has been co-prepared by the VSE association, so regulated firms have been directly involved into the regulatory process. Due to a large number of companies involved in distribution sector, possibilities for benchmarking are considerable, but still it is not used.

6. Conclusion

Regulatory methods differ across the region of Central Europe, but except for Switzerland all of them are based on some form of incentive regulation. Regulatory benchmarking can be used as an element of incentive regulation or as a pure regulatory method (yardstick competition).

The most sophisticated methods of benchmarking are used in Germany and Austria, where energy markets are developed and a large number of firms are operating on the market. In these countries, benchmarking is used in both electricity and natural gas industries. The Polish regulator is using a SFA method in cost efficiency analysis in electricity distribution. However, the Polish energy market is still very concentrated, which limits the possibilities of further development of domestic benchmarking. In Hungary, a non-frontier method of benchmarking is used. The Hungarian energy market is relatively small, causing the need for data from foreign companies. In Switzerland, no benchmarking is used at present. In Czech Republic and Slovakia, some principles of benchmarking are adopted, but not directly to the revenue requirements setting. These markets are small and relatively concentrated.

The possibilities for development of regulatory benchmarking in the Central Europe could be extended by reducing market concentration in order to obtain a larger sample of firms.

Domestic benchmarking is more accurate due to more similar environment (including political and economic conditions, legislation, regulatory framework etc). However, long time series are not obtainable, due to only a short history of modern regulation in most countries (notably those from the former Eastern Bloc). In addition, large vertically integrated companies are still present in the markets, which complicates the separation of regulated and non-regulated activities. An unbundling of these companies would facilitate data collection and comparability. A cooperation with the private sector is needed in order to establish an acceptance of the benchmarking results, which would reduce court costs due to companies undertaking legal steps. A closer harmonization of regulatory frameworks would slightly reduce the disparity of companies and data gathered. Although regulatory agencies are members of pan-european organisations such as ACER or CEER, regulatory policies remain still in the hands of individual countries.

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THE NEED FOR PUBLIC DEBT MANAGEMENT IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT WITHIN THE EUROPEAN UNION

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Public debt is created when the necessary resources for the socio-economic development of a state are greater than the opportunities that exist at that time. The destination of the necessary resources acquired from foreign markets can be either consumption by raising the standard of living (on short term) or investments in order to reduce the discrepancies in relation to the European Union through investments in infrastructure, jobs, human and technical capital development.

The scientific research aims to clarify several key objectives, namely: the theoretical concept and its belonging in the governance politics; the dynamics of public debt in Romania and the identification of specific features of the indebtedness decision, the influence of the current global economic crisis on the Romanian economy, the analysis of Romania's public debt sustainability integrated in the European structures, and proposals for action in order to return as soon as possible to a positive economic dynamics with direct impact on people's standard of living.

The theme of this research is contemporary in the context of the financial and economical global crisis and the difficulties in overcoming this period. The need to coordinate the fiscal and budgetary policies in Romania, the awareness that the accumulation of a large public debt presents a threat to future generations, the increase of the tax pressure over a market that trends towards globalization and the impact that the aging of the population will have on the public finances sparked public controversy, both in the academic environment and in the media. To continuously borrow resources and maintain a stable level for them requires a sustainable public debt, an important objective of any state's tax policy. A sustainable public debt is the result of the market and of the fiscal and budgetary policy decisions.

Although the sustainability of public finances and implicitly of public debt has been an issue extensively debated for over a century, they currently remain vague concepts. Although, intuitively, it is natural to consider that a fiscal policy is sustainable if it avoids financial collapse, there is no generally accepted definition in terms of sustainable public debt, respectively a sustainable level of public debt. The methodology of this research is stressed by the large number of statistical data on public debt dynamics used in the analysis, relevant in this regard are the national and international databases: the National Bank of Romania, Ministry of Public Finances, World Bank, Euro stat, the statistical database of the European Commission, the database of the International Monetary Fund, the Organization for Economic Cooperation and Development, the normative documents consulted in order to ensure the terminological accuracy of the concepts, the numerous theoretical and empirical studies of Romanian and foreign specialists, the views and arguments of scientific researchers with high experience in the field.

The personal contribution to the researched field is present throughout this work. Thus, I aimed to clarify some theoretical aspects of the issues addressed, of some concepts and economic notions to elucidate the studied phenomenon by using a large number of statistical data in order to analyse the dynamics of public debt in Romania, in comparison with other former communist countries and to formulate proposals for a long-term sustained recovery and a sustainable economic growth.

Keywords: public debt, budget deficit, external financing, public debt management, degree of indebtedness, public debt service

JEL Codes: H63 - Debt, Debt Management, Sovereign Debt

I. Introduction:

"The need for public debt management in the context of sustainable development within the European Union" presents the main theoretical issues related to public debt management and its importance in the effective management of public debt, over the objectives and risks associated with public debt management. Moreover, the main objective of public debt management is to ensure that the government's need of funding and its payment obligations are met at the lowest possible cost, on medium and long term, consistent with a prudent degree of risk. The issues of public debt management often start from the lack of attention of decision-makers regarding the benefits of a cautious debt management strategy and the costs of a weak macroeconomic management of excessive levels of public debt. In the first case, public authorities should pay attention to the beneficiaries resulting from the use of a prudent public debt management strategy and of public policies that are coordinated in a complete macroeconomic framework. In the second case, fiscal-budgetary policies, monetary policies and exchange rate policies that are inappropriate to the economic situation generate uncertainty in the financial markets regarding the future returns of investment expressed in local currency, which will lead investors to request higher risk premiums. Particularly in emerging or developed markets, debtors and creditors alike, applying long-term commitments can suffocate the development of financial markets and they can severely impede public debt managers' efforts to protect the government from refinancing and currency exchange risks.

Moreover, poorly structured public debt in terms of maturity, currency or the composition of the interest rate to which unfunded big liabilities are added, were important factors in the induction and propagation of the debt crisis in many countries over time.

The process of managing public debt portfolio is a priority for every government in order to reduce medium and long term exposure to risks.

The main objective in process of public debt management is represented by providing for the governmental financing needs in terms of minimizing long term costs and limiting the risks involved. In our country, during the period proposed for analysis, a series of measures for the permanent improvement of the legal and institutional framework for public debt management were taken. These measures corresponded to a positive macroeconomic context; Romania obtained the best results at the beginning of the transition period. Analyzing the macroeconomic and policies - fiscal, budgetary, monetary, of exchange rate – one can see their continuous orientation towards public debt and budgetary deficit. The financing strategy for the budget deficit and the refinancing strategy for public debt will focus on contracting domestic loans by launching the issuance of public securities.

Domestic public debt represents the total of loans contracted directly by the state or guaranteed by it, from the internal market, in order to cover fiscal deficits, by financing and refinancing them. Also, domestic public debt represents the state's takeover of debts based on special laws, due to losses registered by some companies and state-owned banks. A series of public spending, financed in order to achieve objectives of national interest can also be seen as domestic public debt. The annual growth of external public debt (direct and guaranteed) was based on a rigorous foundation regarding the contract criteria, within limits that did not exceed the country's capacity to assure the service, respectively the reimbursement of capital rates, interests and related fees without a strict policy regarding the use of borrowed resources.

An incorrect structured debt by maturity date is an important factor in triggering the economic crisis. Short and medium term contracted loans with variable interest rates may expose the state budget to a high risk if the international capital markets have changed the conditions regarding the refinancement of these loans. International financial organizations, the IMF and the World Bank, make suggestions on contracting loans for the purposes of directing those loans towards those on long term, thus avoiding countries' indebtedness on short and medium term. Also, an analysis of internal and external public debt service is presented.

II. Literature review

Foreign loans allow a country to invest and consume beyond its domestic production capacity and therefore, to finance the development of capital not only by mobilizing domestic savings, but also by drawing resources from countries with capital surplus. In order to define external public debt will start from the definition of external debt as the due amount in currency, at some point, by one country(s) to other countries and / or international financial institution on the basis of the credits received by the state (government), by private companies with the state's guarantee and also by companies or individuals, that remains to be paid in a period longer than one year²⁰.

The internationally accepted definition of external debt that results from the research conducted by international organizations, which have as the main field of activity crediting those countries that face problems in providing for their financial needs, presents gross external debt at one point as "the total of contractual liabilities used and unpaid by residents to nonresidents and the residents' obligation to reimburse capital rates, with or without interest, or to pay interest with or without capital rates²¹."

In Romania, the Law of Public Debt No. 313/2004 defines the external governmental public debt as "the part of the governmental public debt representing all financial obligations of the state that derive from loans contracted directly or guaranteed by the state from nonresidents individuals or legal entities in Romania"

External public debt is a key parameter to assess the state of public finances; it can be defined as a consequence of the following macro economical issues²²:

²⁰ Ceaușu, Iulian. Enciclopedia Managerial Dictionary, Vol. I. Bucharest: Academic Management Publishing, 2000;, p. 264.

²¹ Klein, Thomas M., External Debt Management – An Introduction, World Bank Technical Paper Number 245, Washington, D.C., p. 56.

²² Gaftoniuc, Simona. International Finances. Bucharest: Economic Publishing, 2000, p. 403.

- low production capacity in relation to consumption, investments and public expenditures;
- insufficient domestic saving, in relation to investments and the budgetary deficit,
- a overly high current account deficit, compared with net inflows of funds (debt is exempted);
- Excessive capital outflows in the form of direct investment or "capital leaks" abroad.

Consequently, the role of external public debt can be seen through the following implications²³:

- a) external loans allow the contracting country to invest and consume beyond its current internal possibilities and, in fact, to finance capital development not only by mobilizing domestic savings, but also by using the savings of countries with capital surplus;
- b) External loans may lead to a faster economic growth, enabling the financing of a greater volume of investments and the mobilization of the country's available resources, giving them a more cautious but a more effective usage.
- c) External loans can also serve to finance temporary deficits of the balance of payments and can provide the authorities with the solution to avoid to taking actions that could jeopardize the country's development program.

III. Research Methodology.

In order to assess the level of external public debt and to correlate it with the situation of other macroeconomic variables (these ratios are more conclusive than the absolute size of debt), a series of indicators are being used:

- external public debt in the year (DPE):

$$- \quad DPE = DPE_d + DPE_g ,$$

- where:

- DPE_d is the external public debt of the state;
- DPE_g is the external public debt guaranteed by the state.
- External public debt service (SDPE), which represents the payments due in order to reimburse external public debt, representing the mature rates in a period of one year (RDPE), the interests and the related fees as well as the costs of issuance and placement of securities (Dob_{DPE})^{24,25}:

$$- \quad SDPE = R_{DPE} + Dob_{DPE} ; (1)$$

- the share of external public debt in GDP:

$$- \quad DPE_{/PIB} = \frac{DPE}{PIB} \cdot 100 ; (2)$$

- the share of external public debt in the volume of exports of goods and services (E)

²³ Klein, Thomas M., External Debt Management – An Introduction, World Bank Technical Paper Number 245, Washington, D.C., p. 2.

²⁴ Moșteanu, Tatiana (coord.) și colectiv, Finanțe publice: note de curs și aplicații pentru seminar, Editura Universitară, București, 2005, p. 264

$$- \quad DPE_{/E} = \frac{DPE}{E} \cdot 100; (3)$$

- the share of interests of the existing external debt in GDP

$$- \quad Dob_{DPE/PIB} = \frac{Dob_{DPE}}{PIB} \cdot 100; (4)$$

- the share of the external public debt service in GDP:

$$- \quad SDPE_{/PIB} = \frac{SDPE}{PIB} \cdot 100; (5)$$

- the share of external public debt service in the volume of exports of goods and services:

$$- \quad SDPE_{/E} = \frac{SDPE}{E} \cdot 100; (6)$$

- external public debt service in the state's budget expenditures (Ch_{BS}):

$$SDPE_{/Ch_{BS}} = \frac{SDPE}{Ch_{BS}} \cdot 100. (7)$$

IV. Results of the research

The period 2007-2010 was characterized by the expression of the global financial and economical crisis. Although all European countries have been marked by different bubbles (the most frequent being the real estate bubbles), the crisis manifested unevenly, depending on specific conditions and governmental policies from each country and especially depending on the anti-crisis measures taken as a response to the crisis.

In Romania, in comparison with developed countries, external public debt has been and continues to be the main component of public debt. Throughout the period, the actual public debt was fueled substantially by external loans and only to a lesser extent on the domestic loans, this structure being specific to developing countries which lack their own capital market capable of meeting the needs of the private and the public sector. The funds attracted were from international organizations (IMF, IEB) with compliance to the conditions imposed and in the cases where the government could not meet those conditions, it turned to private banks that granted loans but with a higher interest rate.

Under the pressure of external financing of budgetary deficit, the authorities have promoted macroeconomic austerity measures, aimed to restrict governmental spending, reorganize the system of pensions paid from public funds, the system of social benefits and health insurances, which had short-term constriction effects.

The painful budgetary adjustments, especially in the field of social benefits have been politically legitimated by the "state reform" slogan and the construction of a neoliberal minimal state.

In reality, this approach was not accompanied by an appropriate and encouraging fiscal recovery, especially in the field of labor taxation nor by a real liberalization of some services or the entrustment of infrastructure works to the market.

An extremely important issue for fiscal and budgetary sustainability on long-term remains the reduced capacity to collect public revenues, which causes an additional tax burden on taxpayers and keeps the premises for structural budget deficits. In this respect, the areas that

require special attention should aim to modernize the rural economy, adjust the tax level of properties, the taxed labor shortages, tax evasion and the numerous exceptions to the general tax regime. The reduced ability to collect or to generate additional budgetary revenues imposes on Romania a redefinition of the fields of state intervention.

In the long term, macroeconomic policies should aim to achieve general economic balance, a medium and long-term sustainable economic growth with the purpose to achieve real convergence, whether it will be expressed by growth of GDP per capita, by reducing labor costs, by the relocation of the share of national economy branches in the generation of GDP or by the degree of openness of the Romanian economy.

The draining budgetary measures taken in 2010 have been misinterpreted as an actual reduction of the Romanian state's intervention in the economy; they rather represent the only solution to reduce the budget deficit because of its funding difficulties.

V. Conclusions

For the recovery of the Central and Eastern European economies several groups of countries can be distinguished. Some countries have managed to contradict the experts forecasts, obtaining better results (Poland, Czech Republic), others have met their forecasts, those being the countries with the strongest economies in the EU (France, Germany), while others faced the collapse of their national economies (Greece, Spain).

To help cushion the impact on their citizens, governments have implemented a variety of initiatives. There are three important reasons why the analyzed countries were affected by the crisis. Firstly, the dependence on the foreign capital inflows (the ability to attract foreign investments meant to develop the national economy) and the money sent home by those working abroad to support consumption and hence the national budget. For example, in Romania and Bulgaria in 2009, the money sent home dropped by 30% -50% compared to 2008 levels. Secondly, a large part of their exports were for countries in the region and the euro zone, so that the volume of transactions fell dramatically. Thirdly, several of the analyzed countries had their national currency dependent on the Euro and the weakened economies had been strongly influenced by Euros fluctuations which have often suffocated the exports.

In the case of Poland, the government used quickly and effectively all the European funds at its disposal in order to cover the capital withdrawals amid the international crisis, the current account deficit became stable and zloty's fall was stopped by the central bank of Warsaw with the help of BCE, avoiding mortgage debtors' entry into payment incapacity on mortgage loans denominated in foreign currencies.

Although the government has contracted a loan through the new "flexible credit arrangement" of the IMF, in very favorable conditions, the National Bank of Poland was not forced to resort to these reserves. Although it had to postpone its accession to the European exchange rate mechanism (ERM II), the Polish government initiated an extensive privatization program to reduce the budget deficit and maintain public debt below 50% of GDP. Thus, Poland regained the investors' confidence that began to return to their country. Because of the fact that this economic crisis was much longer than expected, the 50% threshold was exceeded due to the financing needs of the budget deficit which has increased 5 times in the period under review. The goal of the deficit was the need for co-financing the projects with EU grants and also the investments in infrastructure that is why the output

from this EU recession will find Poland with a healthy economy based on sustainable development.

Before the crisis started, Romania faced a high budget deficit, an overly indebted private sector, a real estate bubble and an over heated economy, Romania called on the help of the IMF in order to flatten the adjustment of internal and external imbalances set in motion by the global economic crisis.

Because of the delay of the Government in adopting tough structural reform measures and reduce public spending, eventually to channel the funds at its disposal to the economic sectors that would really help the development of a sustainable economic development, Romania was looked at and cataloged by the analysts as being without an economic horizon. Even though the percentage of the public debt in the GDP is a reduced one (30.8% in 2010) it is alarming that this public debt has risen with 300% in the analyzed period, from the borrowed sums being financed the social budgets deficits, the Government being content with a relative quietness of the social strata and waiting for the passing of this period without major interventions. The measure to reduce budgetary spending by cutting 25% in the public sector did not have a macroeconomic result because of the useless spending made from the same amount. In the analyzed period, Romania was the only country that had registered a decrease in productivity.

An aspect that probably did not get enough attention is that the financing of the excessive budgetary deficits, whether is done internally or internationally, is not a costless action. On the contrary, the level of the interest rate at which the debt has been contracted, as well as its schedule are extremely important aspects and can become an extreme burden, as situations exist in which the principal of the debt can be compared with the interest. Confronted with the lack of immediate low cost financing, some states have even advanced the unorthodox solution that the government securities be repurchased by the central bank. This option can not even be taken into consideration, as the conditions of the Romania's accession to the Monetary Union targets too also other dimensions of the nominal convergence, beside the stability of the public finances, as would be: inflation, the stability of the exchange rate, interest rates, which would strongly affected by such a decision.

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INTEGRATION OF SEMI-SUBSISTENCE AGRICULTURAL FARMS

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Intensive agriculture, industrial type, contributed to environmental degradation and pollution. Thus, on the one hand, makes intensive use of chemicals has led to neglect of duty to maintain the natural fertility of the soil organic matter through proper fattening. On the other hand, organizing specialized industrial environments, high animal breeders, considered the only marketable livestock production, neglecting the production of manure, thus representing a break with the brutal nature of biological circuits

Following the experience accumulated over two centuries, mankind has drawn valuable education obligation to safeguard the habitat of nature as a collaborator. In this respect, the main task of our times is to develop appropriate technologies humanist ideal, so that man can become a being as fully integrated into the social and cosmic environment.

In the present period as a peasant household current form, is typical of developing countries. It is generated by the result of families who received income from farming and increase farm animalelor. Gospodăria organizational structure is the basic economic and agricultural economy.

On the basis of the idea that organic production is the main cause of degradation of the biological quality of products is inadequate human intervention at various structural levels of the biosphere, and the most severe effects on humans resulting from the cumulation of errors relating to soil, plants and animals. Organic farming places emphasis on quality natural products, the quantity and productivity issues as a peripheral level.

A balanced rural development policy for the future is not an option but a necessity, especially considering the fact that the issue of agriculture and rural development has important national connotations and is a very complex and timely in Romania

Regional development is a concept that aims at stimulating and diversifying economic activities, encouraging private sector investment, helping to reduce unemployment and ultimately lead to improved living standards, according to the regions of the country's development.

Keywords: Peasant household, sustainable development, farms, subsistence, european agriculture

Codes JEL : Q0 , Q1



Introduction

Agriculture is important not only for what they produce, but also the function of society by large agricultural population and its role in environmental protection, preservation of rural life and landscapes. Because of the importance of agriculture in the economy is imperative to be among the priorities for short and medium term development in the restructuring and modernization, and long term to remain a chance for sustainable development of European rural.

1. Typology of farms

Diversification of products and services produced in the rural economy of our country, shows a heterogeneous structure of the activities of farms area, which makes it difficult to define their typology, according to uniform criteria. The activities to be carried out as a peasant grow, the more it requires the establishment of multiple and different criteria. From within the unitary system of criteria: two needed to define the specific nature and peasant: the size of production capacity, the structure of income and use of working time

1.1. Classification according to production capacity

Peasant household can produce goods and services directly correlated with wealth and resources available at household work. Distinguish two types of households:

- *Subsistence peasant farm is a closed household, whose dominant feature is the self-consumption*, combining self-sufficient nature of marketing the production of varying amounts, small products. Priority is self-consumption production in many changing situations is not fully insured to the real needs of rural families ensure their living from agriculture. Living standard of such a farm is different and varies from region to region. Principal factors that determine such differentiation are: wealth of the farm, inherited mentality and traditional culture, education, access to services, the local development, local market for specialty products and public services, incentives and facilities for the small producer, etc..

Subsistence family farms, in most can not qualify to become a strong farm type, they produce primarily for their own consumption. As economic modernization and expansion of market mechanisms, reduces the number of such households is manifested more pronounced tendency of associative forms of organization, leading to the formation of viable farms, run by professionals who produce for market conditions efficiency. Associative forms are now operating type lease agricultural associations and that the economic results achieved so far inconclusive, failed to convince landowners of their viability. This phenomenon is influenced by the current state of the owners having no other alternative, are placed in a position to call the organizers or entrepreneurs associative forms to be received in such an association.

The combination of the developed countries to build on small property fund, which by association, finds support both in production and circulation in the area by providing necessary inputs and value by selling their products in terms of economic return.

Small farms (up to 5 ha) can be considered subsistence family farms. Such a holding is generally devoid of means of production and financial resources which, without state support, have little chance of survival. It produces small quantities of products and varied, depending comercializându need them acoperirii expenses.

- *The peasant type, whose dominant feature is the production for market*, for profit. From this typological group are households that have an adequate financial situation and

investment and specialization of activities are likely to become a modern farm. The commercial farms, have all chances to become family farms like those operating in developed countries.

As development and increased investment process, the peasant household is increasingly linked to the market. This is a springboard for Western-style farms, the entrepreneurs who take on lease land from owners who can not work the land, and entrepreneurs to develop viable farms, the optimum size.

1.2. Classification by income structure and use of working time

Although the two components seem different, they essentially are the same. According to this criterion we distinguish:

- *Agricultural farms derive income solely from agriculture*, the whole working time is allocated only to agricultural activity. This does not mean that the active workforce is employed within the household. Peasant families who have small areas, generally produced for own closed circuit.

Depending on their placement from the market, there are small holdings of about 0.5 ha arranged greenhouses for cultivating vegetables and flowers in culture alternatives to get much higher revenue than grain growing areas of 5-10 ha. Moreover, grain producers have an occupancy rate of time much less than those who practice the culture reduced in protected areas. Due to the low level of technical equipment, a dominant feature of these groups of outer type production extensively.

- *Pluriactive peasant households* who derive income from agriculture and at least another activity such as employment, practicing some crafts or providing services, after the occupation of working time allocated to agricultural activities. Peasant households are deriving income households practice mixed pluriactivitatea generated by objective factors such as: have a surplus of labor, time allocated to domestic and agricultural work are not utilized, farm size does not ensure the existence and the revenue needed development; traditionalism of households to practice agricultural activities during the off season friendly farming: different trades, crafts or provide services to farmers and rural population.

The frequency of these households is higher in hill and mountain areas where the average farm size is small, and in areas where local resources are varied and rich.

2. National Rural Development Programme Objectives

National Rural Development Programme (NRDP) 2007-2013 will be implemented in a period of significant change for agriculture and rural areas of Romania as the country takes its first steps on the EU market and the full effect of the reforms of the Common Agricultural Policy (CAP) will be felt during this period. The first effects are felt in those years, when significant changes occur. Also, growth of the economy in general has a significant impact on the sectors of agriculture and rural economy in terms of opportunities and threats.

National Rural Development Programme in Romania will focus on issues such as competitiveness, environment, quality of rural life, with the overall objectives:

- increasing the competitiveness of agriculture and forestry;
- improving the rural environment;
- improve quality of life and diversification of rural economy;
- initiation and operation of local development initiatives.

Measures under Axis 1 aim, first, improving the efficiency of agriculture and forestry sector to succeed to face the competition resulting in an open environment of foreign trade. The results should be a workforce better trained in agriculture, with an improved age structure, a better structure of land resources, the subsistence farms entering the market, modernized commercial agriculture, higher added value and quality improved products which will further enhance productivity and competitiveness of agriculture and forestry.

3. Support for semi-subsistence farms

Supporting the overall objective of the measure of semi-subsistence farms (141) is to increase the competitiveness of agricultural holdings undergoing restructuring to help ease problems of transition, given that the agricultural sector and rural economy are exposed to competitive pressures of the single market .

Beneficiaries of the measure are individuals engaged in economic activities, mainly farming, the farm which has an economic dimension between 2 and 8 ESU is located within the country, is registered in the register of farms and farm register, sell a part of produced agricultural production and establish a business plan.

Support under this measure is necessary to ensure income during the restructuring and transformation of semi-subsistence-oriented farm market through sustainable use of factors of production, diversification of agricultural production through improved management and introduction of technologies adapted to local conditions.

The first session for submission of projects was held between December 3, 2008 to February 27, 2009, session benefiting from an allocation of 47,607,740 euros, or 10% of the established government financial allocation for 2007-2013.

During this session for submission were submitted 6442 projects with a total amount requested by eligible 48315.000 thousand euros. Of the 6442 submitted projects were selected following the 6262 Selection Committee meeting, out of which 6148 were contracted projects with a value of 46110.000 thousand Euro grant eligible.

Regarding the distribution of approved projects according to farm size, the situation is as follows:

- Holds the largest share of category size <5 ha (74.69% of total projects approved for this measure) of 4592 eligible projects approved and a grant value of 34440.000 thousand Euro;
- 5 ha size ≤Dimension <10 ha has a weight of 15.11% of total projects approved for this measure, approved 929 projects with a value of 6967.500 thousand Euro grant eligible;
- Category "Size ≥ 10 ha" has a weight of 10.20% of total projects approved for this measure, approved 627 projects with a value of 4702.500 thousand Euro grant eligible.

Table 1: Status of projects for each type of farm size

Dimension of the farm	Number of project	Value €	Share (%)
<5 ha	4.592	34.440.000	74.69
5-10 ha	929	6.967.500	15.11
>10 ha	627	4.702.500	10.20

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The total number of semi-subsistence farms supported (6148):

- 786 farms are headed by women;

- 2012 farms are run by young people under 40 years;
- 2711 holdings are in disadvantaged areas;
- 803 apply for Agri-environment farms.

In terms of regional distribution, Constanta South East Region 2 has the largest share, ie 18.38% of total projects approved this measure, followed by North West Region 6 Satu Mare, accounting for approximately 18.33% of total projects approved and South-Muntenia Region 3 with a weight of 16.36%. The three regions have a share of approximately 53.07% of all projects approved under this measure.

Table .2: Regional distribution of aproved projects

Region	Number of aproved projed	Eligible grant amount Euro
1 North – East Iași	977	7.327.500
2 Constanta South East	1.130	8.475.000
3 South Muntenia Târgoviște	1.006	7.545.000
4 South West Oltenia Craiova	615	4.612.500
5 West Timișoara	413	3.097.500
6 North West Satu Mare	1.127	8.452.500
7 Centru Alba Iulia	855	6.412.500
8 București Ilfov	25	187.500
Total General	6.148	46.110.000

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By the end of 2009 have made payments of approximately 9207.196 thousand euros, representing EAFRD contribution 7365.757 thousand euros.

Payments situation in terms of farm size is as follows:

1. Size <5 acres - have made payments amounting to 6878.268 thousand euros, representing 74.69% of the public contribution paid to beneficiaries for the measure, the EAFRD contribution being 5502.614 thousand Euro;
2. 5 ha ≤size <10 acres - have made payments amounting to 1390.210 thousand euros, representing 15.11% of the public contribution paid to beneficiaries for the measure, the EAFRD contribution being 1112.168 thousand Euro;
3. Size ≥ 10 acres - have made payments amounting to Euro 938,718 thousand, representing 10.20% of the public contribution paid to beneficiaries for the measure, the contribution of the EAFRD is EUR 750,975 thousand.

Table .3 Value payments broken down by farm size

Dimension of the farm	Amount paid €	Contribution FEADR €	Share (%)
<5 ha	6.878.268	5.502.614	74.69
5-10 ha	1.390.210	1.112.168	15.11
>10 ha	938.718	750.975	10.20

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Regarding the regional distribution of the value of contracted projects and payments, the situation is shown in the table below:

Table. 4 : The amount contracted and paid broken down by regions

Region	Amount contracted Mil Euros	Amount paid Mil Euros
1 North – East Iași	7,33	1,46
2 Constanta South East	8,48	1,70
3 South Muntenia Târgoviște	7,55	1,51
4 South West Oltenia Craiova	4,61	0,92
5 West Timișoara	3,10	0,62
6 North West Satu Mare	8,45	1,69
7 Centru Alba Iulia	6,41	1,28
8 București Ilfov	0,19	0,04
Total General	46,12	9,22

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Conclusions

European agriculture has a key role in protecting biodiversity. It is important that action on these Community priorities are further strengthened rural development programs. Innovation can contribute particularly to the development of new technologies, products and processes and will therefore support efforts to tackle climate change, renewable energy, water and biodiversity management. Should be granted specific support for innovation with reference to these challenges, to increase the effectiveness of those operations.

With a total area of 238,000 km² and a population of over 21 million inhabitants, Romania is the largest, the second new EU member state. It represents 6% of the total EU and 4% of its population. Investment and competitiveness in Romania are still issues to be improved to be able to accelerate growth and ensure income convergence with the EU.

A balanced rural development policy for the future is not an option but a necessity, especially considering the fact that the issue of agriculture and rural development has important national connotations and is a very complex and present in Romania

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STUDY ON THE CAUSES OF REGIONAL ECONOMIC DISPARITIES IN ROMANIA

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Successive enlargements of the European Union have led to increasing heterogeneity of the development levels of the states and regions members. The Romanian development regions are among the most poorly economically developed European regions and are regarded as economies based on production factors where the development of economy is mainly triggered by the poorly qualified labour and the natural resources.

This paper aims to analyse and to identify the factors lying at the bottom of regional development and the causes of Romanian regional disparities, by comparative analyse and the break down the basic development indicators into their components.

The regional economic disparities from Romania tend to be more prominent due following causes: low level of development of most regions, structure of economy dominated by economic sectors with a low productivity; the low research-innovation potential; the low share of the population having a higher education, reduced capacity of the poorly developed regions to withhold the highly qualified labour, the weak development of infrastructure, particularly poor quality of infrastructure networks.

Romania stays anchored in a development model characterized by an anachronous economic structure, a poorly qualified labour, a slow accumulation of capital and a reduced sustainability of the development rate.

Keywords: disparities, economic development, region, factors, convergence

Clasificarea JEL: O11, O47, R11, R13

1. Introduction

Given the high heterogeneity of the development levels of the states and regions members of the European Union, the regionally policy occupies a central place within the European Union policies. According to the European Committee, in every fourth region of the widened Europe GDP/per capita is below 75% from the EU average, a fact determining the eligibility of regions for the Convergence of the European structural funds objective” (The European Committee, 2006). These “convergence regions” have several characteristics: low levels of GDP and occupancy, they share within the total GDP of the EU being only 12.5%, as compared to 35% for the total population of the EU (Béla Szörfi 2007: 101).

The main objective of the EU regional policy is the increase of the economic welfare and the bringing near of the development levels of regions, the obtaining of the economic and social cohesion meaning the reduction of the economic and social inequalities among the European regions. The economic cohesion is a desiderate followed by the European Community ever since its setting up, so it was mentioned in Article 130a of the Treaty of Rome for the setting up of the European Community. Article 3 of the European Union

Treaty stipulates „European Union must work for a sustained development of Europe based on a balanced economic increase and.. promote the economic, social and territorial cohesion and solidarity within the member states” (European Union 2006: 118).

The important themes of the European Union cohesion policy are the following:

1. Competitiveness which is the central theme of the regional and economic and social cohesion policy. Otherwise, in a report of the European Committee (2002), the EU experts wonder whether the policy of industrial agglomerations itself may be the “landmark” of the EU’s reference objective, namely to become the most competitive region in the world until 2010. In concordance with the mutations produced in the evolution of theories and models for economic increase and development, the Lisbon Agenda put in the centre of attention the economic growth based on the technologic progress and employment.
2. The active policies related to the labour market focus on the encouragement of employment, the consolidation of the social cohesion and reduction of the poverty risk and incidence.
3. The sustainable development means the orientation of the regional policies towards the attaining of the objectives established by Goteborg agenda (2001).

2. Literature review – Economic development and regional disparities

According to the large economic thinking currents that lay at the bottom of formulation of increase/development theories and models, the support of the regions left behind so as to recover the gap separating them from the developed regions may be achieved in two ways: regional development policies and measures (Keynesian and post-Keynesian approaches) and promotion of the economic liberalism (neoclassical approaches) leading to the general economic progress.

A controversial issue related to the regional growth disparities refers to the medium-long term vision on the consequences of regional growth. Based on Solow’s model (1956), the neoclassical economists underlying the role of demand within the regional growth came up with the idea that the regional disparities diminish once with growth.

On the other hand, Myrdal (1957) and other post – Keynesians sustain that the regional growth process is a spatial cumulative one leading to the increase of regional inequalities.

Williamson (1965) shows that in the initial stages of development, when investments in the physical capital are the main engine of economic growth, inequality stimulates growth through the orientation of resources towards those who save money and invest more. Conversely, in developed economies, the accumulation of the human capital replaces the accumulation of physical capital as the main engine of growth. Williamson sustains that in the initial stages of a country’s development, there are increases of regional disparities whereas in more advanced stages, development may lead to regional convergence.

The issue of disparities in the regional economic development gives rise to intense discussions among the development theorists since the goal of regional development is not just the one of identifying methods for the promotion of economic growth and structural changes in economy, but also of improving certain social aspects such as health, education, the work conditions etc. An important problem is to find an adequate manner for the analysis of the regional growth and development processes, to identify the factors contributing to accentuation or diminution of disparities. Depending on the purpose for which they make the measurement of the economic growth and disparity analysis, we may

use the following indicators: increase of total output, increase of output per employed person, increase of output per capita.

The identification of causes of regional disparities supposes the identification of the causes leading to the interregional gap of GDP/inhabitant. Thus, we may identify four factors tightly connected to the interregional differences of GDP/inhabitant: structure of the economic activity, the size and potential of the research/innovation activity, region's infrastructure and accessibility, education and labour qualification (Ciupagea C et al. 2004: 115).

The studies carried out show that between the abovementioned factors influencing the regional GDP and the economic growth potential, there is a relatively strong connection (Ciupagea C. 2004). Thus, the developed regions are characterized by high employment rates in high productivity sectors (industry, constructions and services, mainly productive/producers' services) whereas the poorly developed regions are characterized by large shares of employment in agriculture, a fact that hampers the economic growth. At the same time, a high level of education as well as the existence and development of an adequate infrastructure favours economic growth.

The framework for the analysis of regional development and the accentuation/reduction of the interregional disparities should be extended on other factors related to the mutations and evolutions occurred within the EU economic policies at world level. Thus, knowing that the engine of capitalist economy is represented by the free initiative and competition among entrepreneurs, it is necessary to include in the regional analysis the residential population's capacity to take the risks and responsibilities afferent to the private initiative, to generate the technical progress and innovating activities that might propel them in leading positions of the market, to benefit from competitive advantages created by the property rights.

Regardless of the economic theory or theories shaping the regional development policies at a certain time, a decisive role in the general progress of the region might be played by the social innovations. They refer to the capacity and will of individuals, enterprises and public entities (central or local) to collaborate in order to adapt and permanently improve the economic policies so as to ensure the balance between the capitalization of the factors lying at the bottom of the economic progress and the changes occurring in the economic realities.

3. Research methodology

The different approaches of economic theories and policies related to development must identify and take into account the factors that may lead to the economic convergence or non-convergence among regions and countries. (Ray Debraj 2008). In order to analyse the traditional indicator of the development level – GDP per capita – and to study the causes of its evolution at regional level, it is useful to break it down and study the influence of six factors on the economic development level. These factors mainly refer to the structural characteristics of regions such as: structure of economy, demographic structure, relative competitiveness of factors, efficiency of operation of the local market and labour, productivity differences – given the regional structure of the industrial mixture, the differences in the occupancy rate – given the regional demographic structure (Bruno Bracalente and Cristiano Perugini 2008: 2). This paper aims to analyse and to identify the factors lying at the bottom of regional development and the causes of Romanian regional disparities, by comparative analyse and the break down the basic development indicators

into their components: structure of the economic activity, the size and potential of the research/innovation activity, education and labour qualification, region's infrastructure.

4. Research results - Causes of regional economic disparities in Romania

The comparative regional analyses of our country indicate that there are no developing regions where the economic progress and the development level are uniform in all the composing counties and areas/spaces. In most regions, despite their diversity, we must consolidate and capitalize the factors lying at the bottom of development from the free market perspective (Ciupagea C et al.2004: p117). Thus, besides the activity domains of social interest we must stimulate the economic activities making the object of private initiatives from all fields.

Table 1 Indicators of regional economic disparities
2007

Indicator \ region	GDP/inhab. PPS/inhab.	GDP/inhab. % in EU average	GDP/employee EUR (2006)	Income of private household (PPS/inhab)
North East	6600	27	6583,8	4064,4
South East	8400	34	9219,1	4669,7
South	8500	34	8741,8	4478,5
South West	8100	33	7918,2	4705,5
West	12000	48	12476,1	5757
North West	10000	40	10109,2	5000,8
Central	10500	42	11225,7	5015,4
Bucharest	23000	92	21505,4	9296,3
Romania	10400	42	10496,2	7053
EU27	25000	100	53074,6	18976

Source: Achieved by author based on data Eurostat, Regional statistics, Regions and Cities

The Romanian development regions are among the most poorly economically developed European regions and this fact is shown by Eurostat statistics and documents that characterize the economies of the regions from our country as having a medium development level and so they are regarded as economies based on production factors where the development of economy is mainly triggered by the poorly qualified labour and the natural resources. The only region making an exception and falling into the category of intermediate regions is Bucharest-Ilfov region that registered in 2007 a GDP/inhabitant of 92.2% from UE27 average (Paola Annoni and Kornelia Kozovska, 2010).

The heterogeneity of levels of regional economic development in Romania is very high (table 1). Thus, the North-East region is by far the most poorly developed of the regions of our country characterized by a GDP per inhabitant 3.48 times lower than that of Bucharest-Ilfov region and 3.8 times lower than the average GDP of UE27. PIB/inhabitant of the North-East region established as a share from the average GDP/inhabitant of UE27 is 27%, one of the lowest of all the EU development regions. At the same time, the available income of the private households is about 2.3 times lower than that of Bucharest region and 4.7 times lower than the average income of UE27.

An explanation of these gaps in terms of the GDP per inhabitant is the low work productivity from the development regions of our country as compared to the average productivity of UE27. Thus, the work productivity of the North-East region, expressed as a ratio between the regional GDP and the employed population, is 1.6 times lower than the national average, about 3.3 times lower than the Bucharest region and 8.1 times lower than the average productivity of UE27 regions. The low level of regional work productivity may be attributed to the structure of regional occupancy by activity fields (table 2).

Table 2 Regional economy structure - Employed population by sector

2006

Sector|region	N-E	S-E	S	S-V	V	N-V	C	B
Agriculture	47,7	32,5	35,4	46,4	18,7	29,4	16,8	2,1
Industry	23,1	27,9	32,4	24,1	41,3	32,6	41,7	28,2
Services	29,2	39,6	32,2	29,5	40,0	38,0	41,5	69,7

Sursa: Achieved by author based on data Eurostat INSSE, Statistici regionale

In 2006 the structure of the activity fields was dominated by agricultural activities in the most poorly developed Romanian regions, 47.7% in the NE region and 46.4% in the SW region. The more developed regions (Bucharest-Ilfov, Central area, the Western area) are characterized by a better employment in the industrial and service providing sectors with a work productivity superior to the one in agriculture. We also may notice in all regions a shifting of the labour from agriculture towards the non-agricultural branches, the share of employment in agriculture registering a descending trend. However, the transfer rate of labour from agriculture to industry and services was faster in the more developed regions (central area, western area) than in the more poorly developed regions (NE, SW, NW). The inadequate structure of economy and the high importance of the sectors characterized by a low work productivity in employment and GDP explain why the Romanian economy has known a larger GDP contraction: -7.1% in 2009 and -1.3 % in 2010, as compared to the UE27 average: -4.2% and 1.8% (Eurostat). Accentuation in time of the interregional disparities from Romania is highlighted by increase of dispersion of the regional GDP/inhabitant from 12.8 in 1995 to 35.3 in 2007, whereas for the entire UE27 the regional GDP/inhabitant has a slightly decreasing trend from 35.4% in 2001 to 32.7% in 2007.

An important role in the process of development of regional economies is played by the access of residential population to education and professional training. EU regional statistics shows that the share of the population aged between 20 and 24 years included in the tertiary education is higher in the regions with economy more developed: Bucharest 248.9%, the Western area 66.3%, the central area 55.5%; and lower in the in the less developed regions:

North East 34.2%, South Muntenia 19,7 %, South West Oltenia 36,4 % South East 32.7% (data from 2008). These weights have seen an upward trend during 2002-2008 in all regions, but this was more pronounced in developed regions. The share held by the development region of Bucharest (248.9 %) shows that the academic education institutions from the country's capital city attract students from other development regions. The highly qualified human resources are attracted towards the developed regions offering a better access to the labour market and remuneration.

**Table 3 The extent and potential of research / innovation activities
2008**

Specification	Human res. In science and tech. (% ec. act. pop.)	Researchers, all sect. (% total empl.)	Employment in high-tech sect. (% of total empl)	Total intramural R&D expend. (eur/inhab.)	Total intramural R&D expend. (% GDP)
North East	17	0,12	1,31	15,7	0,39
South East	18,5	0,06	1,21	9,5	0,18
South	16	0,13	1,23	18,9	0,35
South West	18,5	0,09	0,95	10,5	0,21
West	21,8	0,11	4,16	21,6	0,31
North West	22,4	0,16	2,03	25,8	0,45
Central	22,2	0,1	1,71	8,6	0,14
Bucharest	42,2	0,97	6,55	224,9	1,42
Romania	-	0,31	5,6	37,6	0,58
EU27	-	1,04	6,59	481,6	1,92

Source: Achieved by author based on data Eurostat Eurostat, Regional statistics, Regions and Cities

Current models of development in advanced countries and regions, focus on promoting a knowledge-based economy, technological progress, research and innovation (Romer 1986, Lucas 1998, Aghion și Hewitt 2009), but Eurostat data show that the most regions in Romania are not yet able to implement such a model (table 3). The shares of human resources involved in the research and high tech activities are higher in the developed regions than in the less developed ones. Thus, the north-east region which is the weakest of all the Romanian development regions was characterized in 2008 by 0.12% population employed in scientific research as compared to 0.97% for Bucharest region and 1.04% the UE27 average. At the same time, employment in the high-tech sectors was in 2008 of only 1.2 % in the North-East region as against 5.45% in Bucharest-Ilfov region and 6.59% the EU average. In 2008 the research-development expenses per inhabitant from the north-east region were 14.3 times lower than the ones from Bucharest-Ilfov region and 30.7 times lower than the average of UE27 regions. However, these expenses have registered an ascending trend for all regions and the gaps tend to slightly diminish. In 2008, the Romanian development regions allocated for the research-development expenses shares between 0.14 (the central region) and 0.45% from the GDP (north-west region) as compared to 1.42% from the GDP in Bucharest-Ilfov region and 1.92% which is UE27 average. The involvement of the private sector in the research-development activities in the Romanian

regions is extremely reduced as compared to the UE27 average. Thus, the share of the private sector within the average research-development expenses per Romanian inhabitant was 30% whereas the regional average of UE27 was 63.2%.

The data presented above show that the development model of the Romanian regional economies comes into contrast with the current trends of the development models from the European developed countries and regions. Thus, if the main engine of development of the regional economies from the developed countries is the research-development-innovation activity and the development of the innovating sectors characterized by high technologies, the Romanian development model is characterized by an inadequate structure of economy where the agricultural sector absorbs a very large part of the active population.

5. Conclusions

The regional economic disparities from Romania tend to be more prominent due to the low level of development of most regions; thus Kuznetz's and Williamson's hypotheses, according to which in the initial stages of a country's development, there are increases of regional disparities whereas in more advanced stages, development may lead to regional convergence, are confirmed. At the same time, we may notice the existence of some regional growth poles (the country's capital city, Bucharest, and several more important towns of the country) where the factors favorable for development are concentrated: internal and foreign capital, highly qualified labour and the research-innovation activity.

Among the causes of accentuation of the regional economic disparities we can stand out:

- the structure of economy dominated by economic sectors with a low productivity of the production factors. In the most poorly developed region of the country the population is preponderantly employed in agriculture what explains the reduced regional productivities. Unfortunately, the transfer rate of labour from agriculture to the non-agricultural sectors is a very slow one, due to the slow development of the entrepreneurial initiatives of the residential population, mainly in the industrial domains and services having a high technological level.

- the low research-innovation potential due, on one hand, to the insufficiency of the financial resources allocated from the state budget and the poor implication of the private sector in funding the research-innovation activities and on the other hand, to the insufficient human resources weakly motivated and the migration of the highly qualified labour and the people having a higher education towards the developed regions offering better perspectives for employment in fields of competence, better jobs and remuneration. To stimulate the research-innovation activity, it is first of all necessary to develop the business environment and to promote social innovations, the collaboration among the research institutions, the private organisations and the public institutions.

- the low share of the population having a higher education as compared to the developed regions due to the reduced capacity of the poorly developed regions to withhold the highly qualified labour. Another drawback refers to the quality of the training activity and the capacity of education to offer the labour skills and competences required in the labour market. To a certain extent, this explains the weak collaboration or the lack of communication between the business environment and the educational institutions so as to highlight the deficiencies in the formation of labour and to identify the skills/abilities necessary to ensure the access of graduates to the labour market.

As a general conclusion, while the developed countries discuss the passing from the development models focused on the accumulation of production factors to models centered on innovation and the human capital with high skills and competences, Romania stays anchored in a development model characterized by an anachronous economic structure, a poorly qualified labour, a slow accumulation of capital and a reduced sustainability of the development rate.

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THE IMPORTANCE OF IMPLEMENTING THE ICT NETWORK IN ACHIEVING KNOWLEDGE TRANSFER IN THE RURAL AREAS

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Currently in Romania, the information sources available to farmers are limited and belong mostly to the public sector. The knowledge provided is relevant but insufficient in order to meet the needs of the Romanian farmers, especially since they are not oriented towards the market, as the main segment of interest. This paper has the intention to emphasize the need to introduce ICT as the main tool in supporting the decision making process and in resolving the specific issues faced by this sector. In analyzing the current situation regarding this matter, in order to propose ways to resolve the problems encountered in achieving knowledge transfer, until now, were addressed issues such as: the evolution of the knowledge transfer concept, development milestones and actions that marked the RDI sector as the main producer of information, the main supporters of the farmers in their information actions (World Bank, IFAD), means, procedures and techniques used for transmitting knowledge (extension; consultancy). But what is most important is making all this resulted information available for the farmers, fact which can only be accomplished, in our opinion, by introducing and implementing ICT in the rural areas. The main method of research is the statistical data analysis of the data regarding the components involved in the knowledge transfer process and the current status of implementation of ICT in the rural areas. Among the expected results are included identifying the main restrictive factors in achieving knowledge transfer in rural and the main implications that implementing ICT would have on farmers' market position. Introducing ICT in the rural area is, in our opinion the best way to transform information, as a research result, into knowledge, becoming this way a real input for the farmer. In practice, this will lead to lower production costs, lower prices for inputs, increased revenues by increasing the production's prices and, not least, increased level of the European funding resources attracted for supporting investments.

Keywords: knowledge transfer, ICT, sustainable development, rural areas, knowledge society;

JEL Codes : Q01 , Q16

1. General context

The new emerging society based on knowledge, imposes a new approach in the development of rural areas, in which innovation, information and ICTs have become at least as important as the physical geography and infrastructure.

The rapid development of ICTs is transforming the world's economy and society. In the last years, ICT usage in EU has increased considerable to the level in which, according to statistics, more than 250 million people from the member states, are regularly using the internet. At the same time, the public sector has advanced in the use of ICT for delivering its services more efficiently in sectors like education, health and public administration giving birth to the so called online public services. But this is not the case also for the micro-enterprises and SMEs from the rural areas, for which poor access to internet is a discouraging factor for businesses in their attempt to develop various activities and to enter different markets which are still controlled by large enterprises who continue to dominate the use of modern technologies. One reason for this is that existing entrepreneurs have insufficient skills to use modern technologies. Therefore ICT, due to its impact on individuals, businesses and on the socio-economic environment in general, has become one of the most significant factors determining productivity growth, which is reflected in the GDP growth registered by the EU member states.

But despite the progress made in recent years, significant differences still exist not only between Member States, but mainly at national level, between rural and urban areas. According to statistics, by 2007, only 70% of the EU rural population was able to subscribe to a broadband connection as opposed to 98% of the population in urban areas. This was the situation before the accession of Romania and Bulgaria which tipped the balance even more in favor of the urban areas.

In order to be able to identify the main factors of change and the competitive advantages that ICT usage would bring for the rural areas, requires a rigorous analysis of the current way in which services, that are highly impacted by ICT applications, are provided or businesses, as the main source of income for rural communities, are run. This is, a growing.

We also have to consider that the use of ICTs opens up new areas of economic, social and cultural activity, of considerable importance for rural and communities, and calls into question aspects like geographical and political orders, conventional approaches to employment, education etc. In practice this means a thorough rural restructuring that will significantly accelerate the development of the targeted areas, but only if the ICT services provided will be adapted to the specific needs of local population.

In this general context the European Commission has assigned a central role to the development of on-line services. The low level of socio-economic development of the rural areas and the fact that almost half of the EU population resides there, make them the best candidates in taking full advantage of the benefits offered by ICT usage. But introducing these services will be very difficult due to the action of several restrictive factors and will require further planning, provision and support for training, connectivity, equipment.

This is way EAFRD is supporting the development of ICT businesses, services and broadband in rural areas. The opportunity to invest in these areas and in the upgrading the rural population skills, has been strongly encouraged. Investments in hardware and software are eligible in all programmes and in all measures, where their use is relevant. For example investments in broadband infrastructure are concentrated in the measure for developing basic services for the rural population and economy under Axis 3 of rural development.

2. Restrictive factors in implementing ICT in rural areas

Analyzing the situation strictly from the geographical location we can see considerable differences in access and use of PCs and particularly of Internet. The rural areas find themselves in great disadvantage to the big cities for several reasons among which the fact that Internet requires network infrastructure and services and in rural areas, the cost of access tends to be higher and quality of service lower, despite some countries' efforts to ensure standardized pricing and quality. Also incomes tend to be lower in rural areas, and ICT costs are relatively higher for low income groups. Moreover, the members of households in urban areas are more likely to have jobs and different other economic or social occupations in which computers and the Internet are needed. But even if we manage to surpass the technological problematic aspects, the main problem will be to find adequate financial sources to introduce them in this areas.

At the moment only two data sources are available at EU level concerning ICT, namely the Idate data on broadband coverage and the Eurostat Community Survey on ICT usage in households and by individuals. But the information provided is sufficient and relevant in order to describe the general current situation. After analyzing the available data the results confirm the situation outlined before namely that there are significant gaps between urban and rural areas, thinly and densely populated areas, and that these gaps cannot be ignored and need to be reduced.

In order to due that we need to identify and analyze the main restrictive factors from the rural areas that prevent ICT development. Among them we mention:

2.1. Infrastructural deficiencies

Great efforts are needed to create equal conditions in rural areas compared to urban areas in order to minimize the existing gaps, especially since, in some specific cases, there are not even the most elementary technical facilities in the rural areas for using broadband and having internet connection.

Like in the case of Lithuania, Poland, Slovakia broadband coverage in rural areas is particularly low because of local geographical specificities and the related high costs for maintaining the network infrastructure. This is the reason for which the telecommunications operators are oriented to the massive and commercial urban market. Finding a economically feasible solution for both service providers and end users that will satisfy bough is imperative. Thus, one of the most important aspects that has to be taken in consideration in the process of designing and implementing new applications is the consumers capabilities. This is way in order to achieve their potential benefits it is necessary to focus on user-oriented and cost-effective services rather than on technology-driven applications.

2.2. High costs –low incomes for the farmers

Like in other parts of the EU, the high degree of dispersal of the population in the rural areas complicates and increases the price of the provision of infrastructures and basic services, constituting a significant deficiency, because, most of the time, ICT's prices become inaccessible for the Romanian rural population, which leads to situations like the fact that In broadband penetration is about 6 times higher in urban than in rural areas,. This is way the low incomes of the farmers (compared not only to the incomes of the urban population but

also to the incomes of the farmers from other EU Member States) continue to be one of the most important factors holding down ICT usage, especially in countries which have to catch up economically like Romania.

2.3 Young people migration towards rural areas

Rural areas have been out-drained for knowledge mostly by the out-migration of young people to cities and urban areas. This characterizes especially the new Member States among which is Romania. As a result of this negative process, e-learning and the development of infrastructure for its diffusion such as training centers become important priorities for rural areas.

2.4 Low level of education of the local population especially in the field of ICT

The competitiveness of industrial sectors in rural regions depends on the quality of research and the ability of consumers to transform its results (that in the last years can be accessed mainly under electronic form) into knowledge, by consuming it properly. This is way upgrading e-skills through local educational courses and training on PC use as well as training on broadband network development, which will address not only the population involved in agricultural activities but also the ones that develop different activities, becomes a necessity for local rural communities.

The effects of such an action will be seen in the improvement of the decision making process of the farmer that not only has increased his access to more information but also has improved his capacity of understanding it, resulting in a better usage.

3. Main effects of implementing ICT in the rural areas

Implementing ICT can impact on the rural areas in various ways. The effects can be found bought at individual level - farm businesses, but also at community level. Experience shows that even the most traditional activities can, or have the potential to, generate economic opportunities. ICT could provide access to new technologies, practices and production methods, markets current situation, information about different players in the field that would the development of relationships of all types within certain agro-food chains, that would support the cultivation of this opportunities.

Basically ICT and access to the internet represent support tools on one hand for communication and relationships between the rural community members and, on the other hand, for establishing a permanent connection to the economic environment, national or international, especially with the markets and their evolution.

3.1. Improving education level of the local population

ICT and Internet usage requires a set of skills and competencies which are mandatory in order to benefit from their advantages. This is way one important aspect contributing to the development of the rural areas is the farmers ability, as producers and managers, to take fast and correct decisions as well as to implement production practices and technological processes in a way that ensures their sustainable development.

Skills upgrading is a major factor in achieving these objectives. Developing IT competence among the farm community is an essential part of rural development policy and its outcomes can make a vital contribution, for example, to the adjustment of farmers to market situations and the use of new technologies.

Developing broadband without potential beneficiaries who have the skills to use it will not result in positive outcomes. Training can serve not only as a skills upgrading measure, but also as an instrument reducing unemployment, developing entrepreneurship and promoting knowledge.

So shortages of skills and qualified staff represent a major obstacle, and special attention should be given by the authorities in order to improve the situation .

3.2 Improving the local population access to information

The database currently existing in the rural areas is incomplete and inadequate for the farmers current needs, and is still transmitted by oral means among the members of the community, not being able to guarantee the accuracy of the information and giving it a highly volatile feature, This puts Romanian farmer in a disadvantage compared to the other participants from the agro food market. Introducing and promoting ICT has an important role in integrating the existing information in a wider database, making the data more reliable and accessible, for all the community members. The effects would be a shift in the market position of the Romanian farmers that will automatically become more competitive as a result of being better informed.

3.3 Income diversification for the farmers delivering ICT services

Implicating the local population in implementing ICT and maintaining it will result in creating new jobs. By creating additional income opportunities, that will allow the farmers not only to support themselves and their families, but also to become less dependent on changes in climate conditions and market fluctuations, will prevent the migration towards the cities and could even attract part of the population towards the current rural depopulated areas and enrich the socio-economic development of rural areas by providing the local population with services.

3.4 Modernization of agricultural holdings and adding value to products

The European Union, true the funds for sustaining new member states gave Romanian farmers the possibility to modernize their businesses. Substantial support for agricultural holdings, including for the purchase of computers and new technologies and machinery, are provided under two measures of Axis 1 of rural development — “Modernization of agricultural holdings” (code 121) and “Adding value to agricultural and forestry products” (code 123). The purpose of this action is to improve the consumption of information by giving farmers the possibility to develop the necessary infrastructure for accessing it.

3.5 Creation of micro-enterprises and business development

Micro-enterprises and rural off-farm businesses will also benefit substantially when it comes to the development of IT. The creation of ICT-based services, cooperation networking, e-commerce and e-marketing, cluster formation and bookkeeping, are the main targets of the current policy in the field. It is considered that they will represent a real support not only for the existing businesses but also for the start-up companies that will benefit for all the new technology and information provided by ICT.

3.6 Rural tourism and ICT

Rural tourism represents one of the major economic pillars for business development in the rural areas, a non agricultural activity that has become very popular in the last several years and that provides the local population with an additional income.

Tackling rural tourism with ICT can lead to positive effects everywhere, but especially in areas with poor or missing telephone infrastructure where access to the internet is hugely disadvantaged or absent.

In the new period ICT will contribute to rural tourism mainly through the creation of websites for marketing and e-booking, tourist web portals, information centers equipped with ICT, etc

3.7 Other expected effects

The current situation presents sufficient evidence that growth in rural areas can be achieved if ICT is used correctly by addressing current market and socio-economic deficiencies. Among other expected effects that will benefit the rural areas we can mention reducing the unemployment rate by creating new jobs, raising environmental awareness by distributing knowledge and education on environmental problems and issues and promoting sustainability, insuring the local population with the basic services, promoting the local cultural and natural heritage.

4. Conclusions

The new technologies that will emerge could radically change the present distance constraint of the ICT. These points to the need to develop tools and techniques to help rural areas to plan and ensure that the appropriate solutions are selected for their individual needs and in order to adopt to new technologies.

Never the less implementing ICT will benefit the rural areas by providing aid to traditional activities in the promotion and the commercialization of existing, traditional, products (small industry, handicrafts and agriculture) by creation of new service activities.

Agricultura este importantă nu numai pentru ceea ce produce, ci și pentru rolul deținut de societate prin populația agricolă numeroasă și prin rolul său în protecția mediului, în conservarea vieții rurale și a peisajelor. Datorită importanței agriculturii în economie este imperios necesar să se afle între prioritățile de dezvoltare pe termen scurt și mediu în vederea restructurării și modernizării, iar pe termen lung să rămână în continuare o șansă pentru dezvoltarea durabilă a mediului rural european

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THE FINANCING OF THE ADMINISTRATIVE – TERRITORIAL UNITS IN THE WEST DEVELOPMENT REGION THROUGH THE REGIONAL OPERATIONAL PROGRAMME 2007 - 2013

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The research approaches the theoretical and empirical aspects regarding the way the Romanian administrative-territorial units and development regions are organized and function, with emphasis on the West Development Region. It also focuses on the way the local autonomy is exercised and the administrative-territorial units may cooperate in order to perform common projects.

Furthermore, the financial resources of the Romanian administrative-territorial units are analyzed, with focus on the non-reimbursable funds available during the period 2007 – 2013 through the Regional Operational Programme 2007 – 2013, resources which allow the implementation of the European Union principles of cohesion policy.

The status analysis of the implementation of the projects submitted by the administrative-territorial units from the West Development Region and financed through the Regional Operational Programme 2007 – 2013 highlights which are the main areas of interest for the authorities of the public local administration and gives practical solutions for the reduction of the intra-regional development gaps.

This article is intended to be a guide for the administrative-territorial units in the systematic mobilization of the existing local energies and resources by means of projects which should meet the specific needs for development and which should involve the attraction of non-returnable funds with a minimum effort of co-financing.

Keywords: administrative-territorial units, non-reimbursable funds, region, local autonomy, projects.

JEL: F36, O18, O22, R58.

1. Introduction

In the current context, when the Romanian economy deals with the strong effects of the global economic crisis, the local public authorities incur difficulties in the settlement of the problems they deal with and in finding long term development solutions.

The first step to be taken by a local public authority in order to perform a coherent and durable development of the community is represented by the elaboration of projects in conformity with the development needs.

In such a situation, the financial support granted by the European Union to the member states by means of the structural instruments which finance the policy of economic and social cohesion represents an important opportunity of development for the administrative-territorial units.

2. The Administrative Organization of the Romanian Territory

In Romania, the communes, towns, municipalities and counties are defined as administrative-territorial units within which the local autonomy is exercised and the authorities of the local public administration are organized and operate.

The local, communal, town, municipality and county councils, as deliberative authorities, and also the mayors and the presidents of county councils as executive authorities have the duties to solve the public matters of the community, acting as authorities of the Romanian public administration.

According to the Law of the public administration no. 215 dated on the 23rd April 2001, with its subsequent amendments and addendums, in Romania, the local autonomy is only administrative and financial, having as objective the organization, operation, competencies and tasks, and also the management of the inland resources.

The principle of the local financial autonomy implies the fact that the administrative-territorial units have the right to financial resources, which can be used by the authorities of the local public administration when exercising their tasks. The authorities of the local public administration administer or, as the case may be, dispose of the financial resources, and also of the goods in public or private property of the communes, towns, municipalities and counties, in conformity with the principle of local autonomy (Law 215/2001, article 10).

3. The Development Regions

3.1. Definition of the Development Regions

The region notion bears several definitions, according to the type of the European institution which uses it.

The European Union defines the region as “the immediately inferior unit of the state”.

For the European Parliament, the region is “a territory which forms, geographically, a net unit, or a similar assemble of territories which has continuity, where the population has certain common elements and desires to maintain its specific feature thus resulted and to develop it in order to stimulate the cultural, social and economic progress”.

The European Council considers the region “as a medium size interval which can be geographically delimited and which is considered to be homogenous”.

The Assembly of the European Regions defines the regions as “political entities inferior to the state, which dispose of certain competencies exercised by a government, which in return answers before an assembly democratically elected”.

For the European Union, by means of EUROSTAT, there was elaborated the legal framework for the territorial and geographical division of the European Union territory, in order to coordinate the national and communitarian statistics: The Nomenclature of the Territorial Units for Statistics – NUTS (Common classification of territorial units for statistics).

In Romania, the development regions comply with the provisions of the EC Regulation no. 1059/2003 regarding the settlement of a common classification for statistics of the territorial-statistic units for the regions NUTS II and NUTS III and it represents the framework for the collection of specific statistic data in conformity with the European regulations elaborated by EUROSTAT for the statistic territorial level NUTS II.

Thus, in order to provide stability to the NUTS classification, the Law no. 315/2004 regarding the regional development consecrate the composition of the regions NUTS II, by specifying the counties which are part of the respective regions. Thus, at the end of 1998, eight development regions were created. They represent the framework for the elaboration,

implementation and assessment of both the regional development policy and the programs of economic and social cohesion.

3.2. The West Development Region

The West Development Region is administratively-territorially made of four counties: Arad, Caraș-Severin, Hunedoara and Timiș. The West Region has a surface of 32,034 km², representing 13.4% of the country's surface.

Within the West Region, 323 territorial administrative units are registered, which could be distributed as following: 12 municipalities, 30 towns and 281 communes made of 1327 villages. On the 1st January 2010, the population of the West Region was of 1,919,434 inhabitants, representing 8.94% of the Romanian territory's population.

4. The available financial resources for the Romanian administrative-territorial units

The budget represents the document by which each year there are provided and approved the incomes and expenses or, as the case may be, only the expenses, according to the funding system of the institutions (in conformity with the Law 273 of the 29th June 2006 regarding the local public finances, article 2).

The public expenses from the local budgets are materialized in the acquisition of goods and services by the local authorities for the citizens, in the payments made to the citizens in the form of transfers (pensions, subventions, unemployment allowance, etc), and also in the payment of the loans contracted by the main credit authorizing officers.

The local budget incomes are made of: inland incomes (made of revenues, taxes, contributions, other payments, other incomes and defalcated quotas from the income revenue), defalcated amounts from some incomes of the state budget, subventions got from the state budget and from other budgets, donations and sponsorships, sums received from the European Union and/or other donors on behalf of the performed payments and pre-financing (Law 273/2006, article 5).

The inland incomes are the incomes realized locally by the authorities. The level and sources of these incomes are controlled and decided by the local authorities.

The incomes coming from the national level have as main objective to correct the possible unbalances which occur locally both vertically (the level of the local revenues and taxes do not cover the expenses necessary for the provision of public services), and horizontally, since not all the collectivities manage financially in the same way, although they have the obligation to provide equivalent services, both in quality and in quantity.

The authorities of the local public administration have the possibility to complete their own financial resources by contracting internal or external loans, which they could use to both realize public investments of local interest or to re-finance the local public debt.

According to the Law of the local public finances, the local budget incomes could be made also of the non-reimbursable funds granted by the European Union. Thus, as a Member State of the European Union, Romania participates with full rights in the policy of economic and social cohesion of the European Union.

The cohesion policy of the European Union has as objective the reduction of the development gaps between the member states and between the richest and poorest regions, being financed from the budget of the European Union from three funds: The European Fund for Regional Development, The European Social Fund and The Cohesion Fund, referred to as the Structural Instruments.

Within this policy, during the programming period 2007 – 2013, Romania benefits from a financial support in value of 19.667 billion Euros from the Structural Instruments. They represent financial instruments by which the European Union finances the cohesion policy in Romania, taking act for the removal of the economical and social disparities, in order to perform the economic and social cohesion.

5. The Regional Operational Programme 2007-2013 (ROP)

5.1. ROP in Romania

The Regional Operational Programme 2007-2013 represents one of the seven operational programmes elaborated by Romania and adopted by the European Commission and it is financed by the European Fund for Regional Development. The Regional Operational Programme pursues to support the economical and social development of the Romanian regions, both territorially balanced and durable, according to their needs and specific resources, by focusing on the growth urban poles and on the improvement of the infrastructure conditions and of the business environment.

ROP operates in all the eight development regions of Romania, being allocated throughout the current program period 4.178 billion Euros for the purpose of the local and regional integrated development.

The management, administration and implementation of ROP are borne by the Ministry of Regional Development and Tourism (MDRT), which is appointed as the Management Authority for this programme. The eight Agencies for Regional Development and the Directorate of Communitarian Funds Management for Tourism within the MDRT are designated as Intermediary Bodies for the ROP implementation. The Intermediary Bodies bear the responsibility of fulfilling the tasks delegated to them by the Management Authority.

The main eligible applicants to obtain finances through the Regional Operational Programme 2007 – 2013 are the authorities of the local public administration.

5.2. The status of the ROP implementation in the West Region

The financial grant for the West Region in the period 2007 – 2013 managed by the West Regional Development Agency (acting as Intermediary Body for the ROP implementation) is of 416.52 million Euros, representing approximately 10.34% of the total funds granted to ROP financing.

Until the 15th April 2011, 696 projects were submitted to the head office of the West Regional Development Agency, in order to request non-reimbursable financing.

139 projects were contracted, their total value being 350.93 million Euros, of which 254.46 million Euros represent the value of the non-returnable funds, the contracting degree being of 61.09%. 392 projects are under various stages of assessment, pre-contracting or reserve, having a total value of approximately 796.75 million Euros, of which approximately 569.49 million Euros represent the value of the non- reimbursable financing.

Synthetically, the ways which the key areas of intervention of ROP are accessed are presented in the table below:

Table 1. The implementation of Regional Operational Programme 2007 – 2013 in West Development Region (million Euros)

Key areas of intervention	Regional financial allocation	Submitted projects		Contracted projects		Projects: under assessment/pre-contracting/ reserve		Rejected projects		Contracting degree**	Funds use degree***
		No.	Requested financing	No.	Requested financing	No.	Requested financing	No.	Requested financing		
1.1. Integrated Urban Development Plans	42,29	24	72,51	10	42,07	12	22,81	2	7,63	99,48%	153,42%
1.1 „Urban development poles” (Arad and Deva)	28,19	14	28,22	-	-	13	27,57	1	0,65	0,00%	97,80%
1.1 „Urban growth poles” (Timisoara)	70,49	9	36,09	-	-	9	36,09	-	-	0,00%	51,20%
2.1. County roads and urban streets	88,84	52	338,15	13	110,97	29	172,36	10	54,82	124,91%	318,92%
3.1. Health services’ infrastructure	17,59	26	52,05	3	2,35	18	46,87	5	2,83	13,36%	279,82%
3.2. Social care infrastructure	10,08	42	24,93	7	4,18	16	9,39	19	11,36	41,47%	134,62%
3.3. Interventions in emergency situations	10,08	1	9,54	1	9,54	-	-	-	-	94,64%	94,64%
3.4. Infrastructure for education	28,87	71	148,8	18	27,92	41	95,08	12	25,8	96,71%	426,05%
4.1. Business support structures	27,81	23	74,39	2	8,84	17	50,86	4	14,69	31,79%	214,67%
4.2. Polluted industrial sites	23,85	3	32,03	-	-	3	32,03	-	-	0,00%	134,30%
4.3. Micro-enterprises: ****	20,69	383	49,9	79	8,34	218	32,29	86	9,27	40,31%	196,38%
5.1. Cultural heritage infrastructure	23,85	18	66,35	3	24,63	6	13,88	9	27,84	103,27%	161,47%
5.2. Tourism infrastructure	23,89	30	91,66	3	15,62	10	30,26	17	45,78	65,38%	192,05%
TOTAL	416,52	696	1024,62	139	254,46	392	569,49	165	200,67	61,09%	197,82%

Source: data supplied from West Regional Development Agency and processed by author

* The values of the projects were calculated in million Euros

** (contracted value / regional allocation)

*** ((value of submitted projects – value of rejected projects) / regional allocation)

**** Administrative-territorial units are not eligible

Due to the great number of submitted projects, the most of the key areas of intervention were closed and no further projects could be submitted for them, except 1.1, 3.3 and 4.2.

It can be noticed that the most attractive key area of intervention for administrative-territorial units was 2.1, dealing with the financing for the road infrastructure, mostly county roads.

The second area of intervention is represented by the educational infrastructure financing, mostly for the schools rehabilitation.

Regarding the rehabilitation of the patrimonial touristic objectives, due to the considerable value of the projects, only 3 projects could be financed, according to the regional allocation.

On the key areas of intervention where the rule of the state aid is applied (4.1 and 5.2), due to the high level of co-financing, administrative-territorial units from the West Region were not very interested to submit projects, regional allocation being covered from projects submitted by private companies.

Also, where the rule “first-come, first-served” applied, a high competition was recorded and the available funds were quickly finished, in comparison with the key areas of intervention where the funds were distinctively granted for administrative-territorial units acting as “urban development poles” and “urban growth poles” respectively, for which even up to the current date there were not submitted sufficient projects to cover the allocated funds.

Conclusions

In Romania, the communes, towns, municipalities and counties are the administrative-territorial units within which the local autonomy is exercised and where the authorities of the local public administration are organized and operate, having the purpose to solve the public matters of the community. For the purpose of carrying out certain projects of common interest, the administrative-territorial units could cooperate together or could be associated, forming partnerships or associations of inter-communitarian development.

The solving of the community problems depends on the level of the available resources, on the management quality of such funds, but also on the cooperation between the various structures of the local administration.

The degree of the local autonomy of a community depends to a great extent on the amount of the incomes realized locally correlated with other income resources of the local budgets. The ideal situation would be that the inland incomes could cover the expenses made in order to fulfill the local needs. But for that purpose, the competences of the local authorities should be correlated with the incomes of the local budgets, and in reality this happens very rarely.

The development regions of Romania do not have the statute of administrative units, but they represent territorial units large enough to constitute a good basis for the elaboration and implementation of regional development strategies, allowing an efficient use of the financial and human resources. The scope for which these development regions were created had in view the support granted for the larger communities in their action to settle the problems which go beyond the administrative borders and which surpass the financial possibilities of one county.

By implementing the Regional Operational Programme 2007 – 2013 it is intended to reduce the inter-regional disparities, and also the disparities inside the regions, between the urban and rural areas, between the urban centers and their adjacent areas, and, within the towns, between the attractive and non-attractive areas for the investors.

The regular assessment of the progress recorded by Romania in the process of European integration has constantly showed the necessity to strengthen the capacity of the administrative-territorial units by means of projects which should allow the attraction of non-returnable funds with a reduced effort of own co-financing.

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THE DANGER OF “PUTING ALL THE EGGS IN ONE BASKET” SOME CONCERNS REGARDING ROMANIA’S EXTERNAL TRADE

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Trade patterns across the globe vary in certain ways. For the EU27, the analyzed data suggests that approximately 70% of all Romania’s imports, and the same amount of its exports, are intra-community oriented. The question that arises is what will happen to te Romania’s external trade, if a crisis hits Europe? If countries like Germany, France, Italy, and United Kingdom are hit the hardest in this hypothetical European crisis, Romania will soon follow them. In order to decrease the impact of such possibility, it is necessary to tap new trade opportunities. For this purpose, first we have to analyze the present situation. Based on Eurostat, World Trade Organization, and the Romanian Statistics Institute data from 1999 to 2009, and on the works about trade creation (Balassa 1965, Jovanovic 2005, Molle 2006), the paper wants to point out the aspects of trade concentration in certain regions after the establishment of free trade agreements, and the danger posed by financial crises. This paper analyzes first the situation in the EU27, scanning each member state in order to see the degree of trade relations intra / extra – EU. The data will be than compared to another set of analyzes of other four important regions, the Andean Community, ASEAN, MERCOSUR, and NAFTA, whose free trade agreements could support such of comparison with the EU trade relations. The paper follows the assumption that EU27 has the most integrated trade relations among all the analyzed regions. Based on this assumption and on statistical data that points out the percentage change of total imports and exports in the Romanian GDP, some conclusions will be drown out in order to establish some necessary measures to prevent a future crisis, measures that involve the political class, taping new trade opportunities such as Latin American countries, Middle Eastern countries, and South-East Asia, but not forgetting Russia, Romania’s former main export partner, establishing clear objectives to future embassy personnel, and a more aggressive advertising campaign in the selected target markets conducted by national agencies.

Key words: free trade agreements, custom union, Romania’s trade relations, imports, exports.

JEL codes: F01, F10, F14, F15,

Introduction

Everybody wins from external trade. This phrase is used almost in every book that you read on this subject. It doesn’t matter that you are a producer, a consumer, a retailer, a distributor, or an economic agent part of the logistic chain, everybody takes a piece of the pie, and they are happy about. People have started trading because not all the goods and services are produced inside a country, because that country is not endowed with the necessary resources (natural, technological, human and capital resources), or just because the purchasing costs are cheaper. That’s why people started focusing on barter as the main process, ending up paying money on what they want to buy. For example, if you are a Romanian consumer that

wants an iPod, you need to import it because this device is designed and produced outside the Romanian custom territory.

This relationship between supply and demand has been the cornerstone of modern capitalism and free markets, where clients demand newer, cheaper, enhanced, greener products every time, and producers trying to keep up with them. If you look this thing from the supply side point of view, you will be confronted with two scenarios. In the first situation, you can be a big multinational corporation, having production facilities all over the world, supplying the international markets from multiple locations. In the second situation, you are a small company, with no production facilities abroad, trying to export your products. If you sell them to another company, you need to search the international markets for someone whose needs match your offer. After negotiations, you will start doing business with that company because the price is right. After a while, you get acquainted, starting an interpersonal relationship, ending up putting the bricks to a solid foundation. In the end, almost all of your production is sold to your partner, and everything goes smooth. But what happens to you, and your business, when your partner starts facing some setbacks?

Trade situation in the EU and across the Atlantic

The answer lies in the analysis of trade patterns across the globe. Based on Eurostat and World Trade Organization data from 1999 to 2009, and on the works about trade creation (Balassa 1965, Jovanovic 2005, Molle 2006), the paper wants to point out the aspects of trade concentration in certain regions after the establishment of free trade agreements, and the danger posed by financial crises.

The main purpose of a free trade agreement is to encourage trade creation among the states that signed it. For the EU27 as a trade union, and for the other four free trade agreements, based on Eurostat and World Trade Organization data, the figures bellow presents the current state of external trade among regions and countries.

For the EU27, data analyzed (Table 1: Share of the Intra-EU27 trade, and the situation of the Trade Balance) suggests that approximately 70% of all imports, and the same amount for exports, are directed to other member states.

With the exception of the Netherlands (where the average sum shows that less than 50% of its imports come from the EU27, but more than 80% of its exports go to the EU27), and Malta (where the average sum shows that less than 45% of its exports go to the EU27, but more than 70% of its exports go to the EU27), the rest of the 25 member states register high figures both on the import side and on the export side.

Cyprus registers the biggest increase in its trade with EU27, with its figures jumping from 60% in 1999 to almost 70% in 2009.

Although the financial crisis affected trade relations, the figures presented show that in 2009, almost every state kept its share of trade with the EU27.

If we take a closer look at the situation of the external trade balance situation, out of the 27 countries, only 7 register a trade balance surplus with the EU27, the Netherlands, Germany and Belgium having the highest figures.

On the trade balance deficit side, out of the 20 member states, the United Kingdom, France, Spain, Greece, Portugal and Romania register the worse deficits with the EU27 member states. What is more curious is that France and Portugal do not register corrections amid the financial crisis, having their trade deficits increased between 2007 and 2009.

The worse correction was suffered by Spain, its trade balance deficit reducing by almost 60%. Romania and the United Kingdom follow the same correction, the first having its trade balance deficit reduced by 55%, and the second with 30%.

The curious evolution is represented by Poland, reducing its trade balance deficit year after year, ending 2009 with a surplus of 609 million euro's.

From all of this, the Czech Republic and Slovakia win the most, registering trade surpluses in all the years analyzed, having their trade balanced increased exponentially between 2005 to 2007, and keeping this phase through 2009.

Table 1: Share of the Intra-EU27 trade, and the situation of the Trade Balance.

	1999		2001		2003		2005		2007		2009	
	Imp	Exp	Imp	Exp	Imp	Exp	Imp	Exp	Imp	Exp	Imp	Exp
Belgium	72%	79%	72%	78%	74%	77%	72%	77%	71%	76%	71%	76%
	20491		22046		21581		21539		27345		21915	
Bulgaria	55%	57%	57%	61%	58%	63%	63%	60%	58%	61%	60%	64%
	-686		-1172		-1336		-2284		-4559		-2497	
Czech Republic	77%	87%	75%	86%	71%	87%	81%	86%	80%	85%	78%	85%
	1359		1959		4930		3635		7164		9854	
Denmark	74%	71%	73%	70%	73%	70%	71%	71%	73%	70%	70%	67%
	1884		3336		4058		5227		562		3881	
Germany	66%	65%	65%	64%	66%	65%	64%	64%	65%	65%	65%	63%
	40307		55547		77798		98947		126577		70543	
Estonia	73%	86%	66%	81%	65%	82%	76%	78%	79%	70%	80%	69%
	-445		-178		-414		-1432		-3352		-1332	
Ireland	63%	67%	67%	64%	63%	62%	67%	64%	70%	63%	66%	61%
	17384		21605		21257		19478		13479		21329	
Greece	70%	66%	64%	64%	58%	65%	58%	62%	58%	65%	64%	63%
	-13147		-15478		-15385		-16898		-20996		-18566	
Spain	70%	74%	69%	74%	69%	75%	64%	72%	63%	71%	61%	69%
	-16695		-21691		-23964		-36897		-48212		-18991	
France	69%	65%	68%	64%	70%	67%	68%	63%	70%	66%	69%	62%
	-3905		-15951		-16550		-37211		-52381		-61690	
Italy	66%	64%	62%	61%	63%	62%	59%	61%	58%	61%	57%	57%
	5351		3366		-1473		-186		6720		-2295	
Cyprus	59%	58%	59%	55%	60%	61%	69%	73%	69%	72%	72%	67%

	1999		2001		2003		2005		2007		2009	
	Imp	Exp	Imp	Exp	Imp	Exp	Imp	Exp	Imp	Exp	Imp	Exp
	-1421		-1936		-1898		-2649		-3600		-3451	
Latvia	76%	78%	76%	79%	76%	79%	75%	77%	77%	72%	75%	68%
	-845		-1222		-1465		-2087		-4263		-1567	
Lithuania	60%	74%	55%	73%	56%	63%	59%	66%	68%	65%	59%	64%
	-715		-198		-914		-1203		-4073		-170	
Luxembourg	82%	88%	81%	88%	77%	89%	73%	90%	74%	89%	72%	87%
	-1923		-1588		-567		749		-335		489	
Hungary	72%	84%	66%	84%	64%	84%	70%	81%	69%	79%	69%	79%
	987		3719		4808		3537		6517		8784	
Malta	66%	49%	65%	53%	68%	49%	76%	52%	74%	49%	69%	42%
	-853		-760		-974		-1261		-1455		-1142	
Netherlands	57%	82%	54%	81%	55%	80%	49%	80%	50%	78%	49%	77%
	57340		84508		81934		116108		133624		120390	
Austria	82%	76%	81%	75%	82%	75%	80%	72%	79%	73%	78%	72%
	-7726		-7956		-7310		-10092		-7709		-9338	
Poland	72%	82%	70%	81%	70%	82%	75%	79%	73%	79%	72%	79%
	-10121		-6413		-3077		-5019		-7953		696	
Portugal	79%	84%	77%	81%	79%	81%	77%	80%	75%	77%	78%	75%
	-10195		-11955		-10386		-13130		-14196		-15801	
Romania	69%	73%	67%	75%	68%	75%	63%	70%	71%	72%	73%	74%
	-918		-2093		-2700		-4915		-15314		-6881	
Slovenia	77%	74%	77%	71%	77%	68%	79%	68%	74%	69%	71%	69%
	-1417		-1459		-1670		-2434		-1756		-478	
Slovakia	75%	89%	72%	91%	74%	86%	78%	87%	75%	87%	75%	86%
	657		872		1757		678		4056		4820	
Finland	69%	65%	69%	61%	68%	60%	67%	57%	64%	57%	65%	56%
	5080		3941		2646		-1600		-855		-3308	
Sweden	71%	63%	70%	59%	72%	59%	70%	59%	71%	61%	68%	58%
	4044		410		-134		-1063		-4105		-3491	
United Kingdom	55%	61%	54%	60%	57%	59%	56%	57%	55%	58%	53%	55%
	-11896		-23380		-40185		-55212		-62459		-43704	

Source: Own computations based on Eurostat data for the EU27 member states.

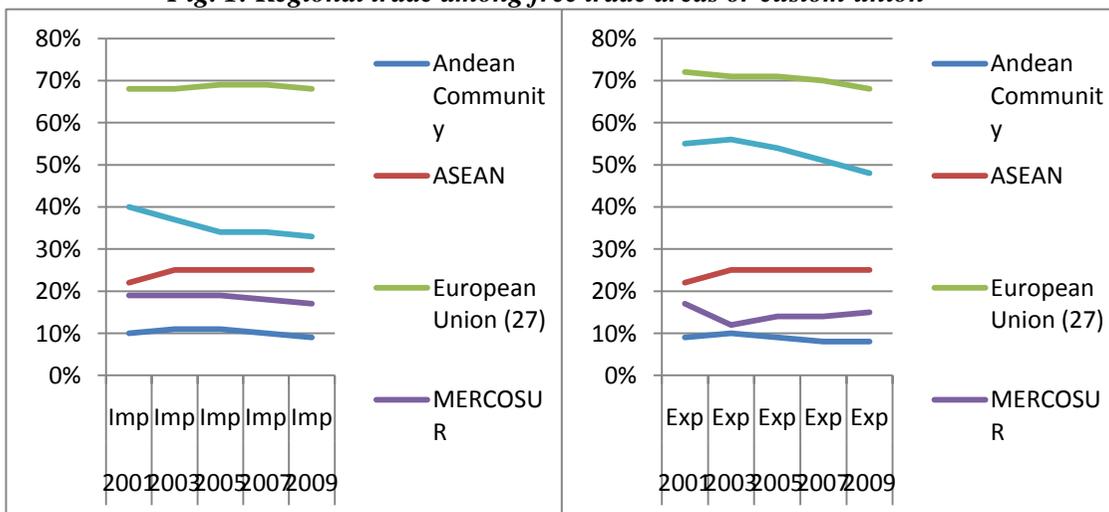
On the other side of the Atlantic, the situation is a little different. Having picked the regions for analysis, with:

- Andean Community (Bolivia, Colombia, Ecuador, Peru)
- ASEAN (Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam.)
- EU 27 (countries stated above)
- MERCOSUR (Argentina, Brazil, Paraguay, Uruguay, Venezuela)
- NAFTA (United States, Canada, Mexico)

The results showed bellow (Fig. 1: Regional trade among free trade areas or custom union), illustrate that on the import side, the EU27 has the most integrated commerce of all the analyzed regions, with imports holding steady around 70%. The closest regional trade community is NAFTA, which registers a decline on its imports in the analyzed period, decreasing from almost 40% to 33%. ASEAN countries register a steady evolution, their imports increasing from 23% to 27% and holding steady. The imports in MERCOSUR suffer a slight decrease, amid the financial crisis, from almost 20% to a figure close to 17%. And last but not least, the Andean Community which registers steady figures near 10%.

On the export side, the situation with EU27 remains almost the same, decreasing from 2007 to 2009. In the NAFTA region the figures are more interesting, observing a steep decrease of exports between the three countries starting in 2003, decreasing from 56% to 48%, a decrease of almost 15%. ASEAN registers the same evolution on the export side, meaning a steady increase from 23% to 27% and holding steady. The fluctuations inside MERCOSUR on the other hand, point out a decrease from 2001 to 2003, and after that, just a mild recovery. Again the last but not least, the Andean Community is closed to the 10% line, having slight fluctuations in the analyzed period.

Fig. 1: Regional trade among free trade areas or custom union



Source: Own computations based on Eurostat and World Trade Organization data.

The regional crisis hypothesis and its impact on Romania's trade

We are familiar with a crisis situation from time to time. An old saying tells us to learn from our mistakes so that we won't repeat them but somehow, we manage to forget this wisdom. The current financial crisis that began in late 2007, was so intense, that surpassed the previous regional ones (The "Tequila crisis" 1994 , the Asian Crisis 1997, the Russian Crisis 1998, and the Argentinean Crisis 1999-2002).

Because of its intensity, almost every corner of the globe was caught in this whirlpool. Consumption dropped dramatically, unemployment phenomenon and the bankruptcy cases soured, lending money became scarce, and investments stalled. Because of all this, inevitably, trade was affected.

Assuming now that there is only a regional crisis, like those mentioned before, the question is what happens to the Romanian trade, if a crisis situation hits Europe. As we saw above, almost 70% of our trade relations are with the EU member states. If countries like Germany, France, Italy and United Kingdom are hit the hardest in this hypothetical European crisis, Romania will soon follow them.

Trying to see what happened in the current financial crisis, and trying to cope the numbers with a future European crisis, we take a closer look at Table 2. If we watch closely, the steepest decline was in the import section. Because many Romanians were relying on cheap credit to finance their consumption and because in 2008, all the banks stopped lending money, we can see what happened (a sharp decline of imports).

On the export side, although it surged from 24% to 25% in nominal terms, in real terms, it didn't. In 2009, the Romanian GDP decreased with almost 8%, meaning that the same amount of exports of 2008, were now divided to a smaller GDP. That means, the West stopped making new orders, the industrial production declined, and so did our exports.

Table 2: Share of Exports and Imports in the Romanian GDP between 2000 - 2009

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
%X/GDP	28	28,4	30,3	30,8	31,2	28	26,4	23,9	23,7	25
%IM/GDP	32,5	35,7	36	38,6	39,9	37,8	38,5	38,3	37,5	30,2

Source: own computations regarding the percentage of imports and exports in total GDP, based on data provided by INS (*National Institute of Statistics of Romania*)

Conclusions

Trade relations among EU27 member states represent more than 70% of their total trade. It is a high figure that can have severe consequences if a regional crisis hits the region. In order to reduce this possibility, it is necessary to tap new trade opportunities.

The data analyzed points out that the Andean Community, ASEAN and MERCOSUR have the least integrated trade relations, while NAFTA and EU27 present a different situation. If a crisis hits the first three regions, it is possible to avoid a steep decline in trade relations, because the main trade partners are not there.

Highlighting the Romanian situation, it is known that its products are not as competitive as the products of our EU15 Member States. Because of this, we should rethink our strategy and try to encourage the following strategies:

- benefiting from all trade agreements signed by the EU, we should try to divert a part of our exports to Latin American countries, Middle Eastern countries, and South-East Asia, where the Romanian products are more competitive.
- the state department agencies should work together in order to promote more aggressively the Romanian products and services on the international arena, especially towards the selected target markets, through international fairs, bilateral economic forums.
- making international political visits that involve the participation of high ranking political figures accompanied by important business people, in order to establish future commercial contracts and develop trade relations
- all our ambassadors and economic attachés should review their work by including some clear objectives regarding a certain number of export contracts, a quantum sum that needs to be achieved, and what measures need to be taken in order to have a good information flow between them and the national business associations.

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This paper is a result of the empirical research pursued by the author in the project: “*Study concerning the identification and the improvement of the Romanian companies developing external trade activities’ competitive advantages, for maximizing the positive effects of the EU accession*” (SVACEX), financed by the Romanian Authorities (UEFISCDI) with over 200,000.00 Euros. For further details, see: <http://steconomice.uoradea.ro/svacex>.

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SUSTENABLE DEVELOPMENT OF THE ROMANIAN ECONOMY BY ADOPTING THE CHINESE MODEL OF SPECIAL ECONOMIC ZONES

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The architecture of the Chinese economy began to take shape in the late 1980's, because of the new reforms that the Chinese Communist Party started to take. With the death of Mao Zedong in 1976, the Chinese leadership is taken by Deng Xiaoping, who stated a blitz course in capitalism. The new president encouraged foreign direct investments by creating special economic zones near the coastal cities, where foreign companies obtained several tax breaks and other incentives, only to invest in those regions. With the help of statistical data from WTO, IMF, and the World Bank, the current paper analyzes the impact of these special economic zones on the Chinese economy, ranging from mutations in the labor market and economic sectors structure and their evolution in the formation of the GDP, FDI inflows, and last but not least external trade and current account situation. On the other hand, the paper tries to make a connection with Romania, computing and predicting, based on the Chinese figures, the way in which the Romanian economy, by creating four economic zones within the counties of Satu Mare, Bihor, Arad, and Constanța, will be able to experience the same growth. The first three counties have been picked up based on their proximity to the Schengen area, and/or on their infrastructure, plain terrain, and a qualified and skilled labour force. Constanța, the only one that resembles with its Chinese counterparts, has been taken in consideration because of its capabilities of shipping products right away as they are manufactured. The results would decrease the disparity that exists in revenue levels across Romania, Bucharest leading the group way ahead of the other counties. Foreign direct investments in those areas will attract more others made by the local authorities in the infrastructure (schools, universities, roads, airports, high speed railways). This development will have a direct impact on the current account of the Romania's balance sheet of payments, while its external trade deficit will reduce in time, even transforming in a trade surplus, and helping this way in putting an end to the chronically external debt.

Key words: special economic zones, counties, external trade, economic impact, foreign direct investment

JEL codes: F21, F32, G18

New conditions of doing business in China

Leaders of any country feel when something needs to be changed. In 1978, the Chinese communist leader Deng Xiaoping, felt that the Chinese economic model was suffering greatly and something was needed to be done. In a comparison with Romania today, when every economic reform affect all the inhabitants, the Chinese started with only a handful of regions where they tried to experiment different approaches that were targeting fiscal policies, labor legislation, bureaucracy and other measures that were similar to those in the capitalist western economies. All these measures were put in action in the so called "Special Economic Zones" or simply SEZ.

In order to understand what a SEZ is, we will take a look at what some international organizations define them:

-SEZs are generally defined as geographically delimited areas administered by a single body, offering certain incentives (generally duty-free importing and streamlined customs procedures, for instance) to businesses which physically locate within the zone

-Designated areas in countries that possess special economic regulations that are different from other areas in the same country. Moreover, these regulations tend to contain measures that are conducive to foreign direct investment. Conducting business in a SEZ usually means that a company will receive tax incentives and the opportunity to pay lower tariffs.

In 1980, four SEZ were created - Shenzhen, Zhuhai, Shantou and Xiamen - in order to experiment how new legislation, labor conditions and a lower bureaucracy will interact with the economy. And the results came quickly. As presented below (Table 1: FDI Inflows in SEZs, million current US\$, 1978–2008) foreign direct investment started to pour in, reaching almost 4 billion \$ in 2008 for Shenzhen, 1 billion for Zhuhai and Hainan. All the figures indicate a huge increase, especially after the year 2000, after China got accepted in the World Trade Organization. This move made China more appealing to international investors. As presented below, all four SEZ registered a surge in FDI inflow.

Table 1: FDI Inflows in SEZs, million current US\$, 1978–2008

Year	Shenzhen	Zhuhai	Shantou	Hainan
1978	5.48	n.a.	1.61	0.1
1990	389.94	69.11	98.09	100.55
2000	1961.45	815.18	165.61	430.80
2006	3268.47	824.22	139.61	748.78
2007	3662.17	1028.83	171.62	1120
2008	3929.58	1138.49	n.a.	n.a.

Source: SBHN 2007, SBST 1994, SBST 2007, SBSZ 2007, SBSZ 2008, SBZH 2007

All of the investment made was concentrated on building production facilities from scratch, and from there to supply the internal market and the ship products all over the world. As presented in Table 2, exports increased exponentially, Shenzhen leading the group and being the first in the group to register figures above 100 billions \$, reaching almost 170 billion \$ in 2007. These numbers are the result of FDI inflows in these regions, as well as the accession into the ranks of WTO.

Table 2: Exports, million current US\$ in SEZs, 1978–2008

Year	Shenzhen	Zhuhai	Shantou	Hainan
1978	0.009	0.009	0.251	n.a.
1990	8.152	0.489	0.841	0.471
2000	34.654	3.646	2.595	0.803
2006	135.959	14.843	3.484	1.376
2007	168.542	18.477	3.912	1.838
2008	163.780	19.73	3.278	n.a.

Source: SBHN 2007, SBST 1994, SBST 2007, SBSZ 2007, SBSZ 2008, SBZH 2007

All that inflow of FDI, the surge in exports, automatically influenced the living conditions in those zones. For instance, if we watch closely in Table 3 and 4, its presented the evolution of the GDP and Per Capita GDP.

These four zones made it possible to present the multiplier effect of Keynes upon the local economy. If the state offers you tax brakes for the next 30 years, you, as a business entity, will build a production facility. Building a production facility means hiring local workers. Perhaps, some of your suppliers will follow you there. If everything goes well, some of your competitors will join in. This step can be made in any industry. At one point, if the Chinese see that there are jobs needed in that region, they will move there in order to work for a higher salary and better working conditions.

If this thing happens, we can imagine that the local administration will earn a lot of money from local taxes. If the GDP of the region rises, so does the incomes for that region. Now the local administration has money to invest in the infrastructure (roads, highways, electricity, airports, bridges, optical fiber, railways, hospitals, schools, and universities). All these measures connect themselves, developing that region, enhancing its competitiveness.

Table 3: GDP of Special Economic Zones, 1978–2008, billion current RMB

Year	Shenzhen	Zhuhai	Shantou	Hainan
1978	0.196	0.209	1.079	2.886
1990	17.167	4.143	7.245	10.242
2000	218.745	33.143	45.016	52.672
2006	581.356	74.77	73.738	105.285
2007	680.157	89.59	85.01	122.96
2008	561.176	70.041	72.083	106.275

Source: SBHN 2007, SBST 1994, SBST 2007, SBSZ 2007, SBSZ 2008, SBZH 2007

Everybody wins from this chain of events. The companies receive tax breaks, and in time they will be able to search from a pool of better educated workforce. That workforce, in the beginning, it will be composed of “blue colored” jobs, meaning the workers on the production line. After a while, when investments will be made in the education sector, “white colored” jobs will become more and more demanding, and better paid. Table 4 illustrates that path, in 2007 a worker receiving more than 10 times it did in 1990, in almost every region.

Table 4: Per capita GDP of Special Economic Zones, 1978–2008, current RMB

Year	Shenzhen	Zhuhai	Shantou	Hainan
1978	6.6	579	366	510
1990	8.724	6.678	2.029	1.562
2000	32.8	27.693	9.741	6.798
2006	69.45	52.185	14.872	12.654
2007	79.645	61.693	17.048	14.631

Source: SBHN 2007, SBST 1994, SBST 2007, SBSZ 2007, SBSZ 2008, SBZH 2007

These figures make us think, for how long are we going to be able to call China a cheap country. If the level of income will rise in the same manner, we will see how part of the production of these zones will be diverted from exports, to internal demand.

Present situation on the home front

The Chinese case can be a good case practice, in order to imitate and try to implement in our own way. We also should pose the same question that Deng Xiaoping did in late 1980s, when he asked himself: what fiscal measures are needed in order to boost the FDI inflow. In order to answer that question first we have to analyze the balance sheet of one municipality, let’s say Oradea. In Table 5 are stated the main indicators that compose the municipality balance sheet.

It is known that due to the “color” of the government, some municipalities that have mayors from the ruling party receive larger subsidies, and those who don’t receive less. In this case, Oradea has the color “yellow” and the ruling government is “orange”.

I have omitted those subsidies because they can vary from time to time, as the government does, and try to stress those factors that have a more stable component.

Table 5: Brief balance sheet of the city of Oradea in 2010

No.	Explanation	Code	Plan thousand Lei
A	Incomes		246.018
1	Split shares from the income tax	04.02.01	111.020
2	Taxes on corporate buildings	07.02.01.02	25.500
3	Taxes on corporate motor vehicles	16.02.02.02	6.900
4	Revenues from concessions and rentals	30.02.05	5.800

Source: Local Council approved balance sheet on 2010

If that’s the case, than any municipality needs to widens its share from the income tax. As we can see in Table 6, a large portion of the income tax comes back to the place where the contributor pays he’s taxes. We can observe the evolution, from 47% in 2006, to 44% in 2010, and perhaps in the future, even less.

Usually these money are spent on infrastructure maintenance (roads, schools, hospitals), and on public services. If this is the case, than any municipality needs to widen its colleting points by encouraging companies to invest in its zone, and to hire locally. From this point of view, if a town receives more, it can spend more.

Table 6: Percentage of the revenue tax returned to the place of the taxpayer

Revenue tax	Law no.273/2006	OUG 63/2010
% returned to municipalities where the tax payers register their activities	47%	44%
% returned to county budget where the tax payers register their activities	13%	12%
% returned to a distinct account to the tax collectors of each county, in order to stabilize the deficit	22%	21%

We also have to take in consideration that a suffocating fiscal legislation opposes and diminishes the entrepreneurial spirit, suffering modifications almost every year that doesn't take into account mid or long term planning activities of local companies. There is no consistency of the fiscal policies, some of them entering in effect not from the beginning of the new fiscal year, but right away as the law passes the senate approval. The other disturbing case is the sum of taxes that an employer must pay for one employee, sum that amounts almost 60% of its gross salary, so for example if somebody wins 1.000 LEI, the state takes 600 LEI.

The need for a change

Why do we need to adopt the Chinese model of Special Economic Zones?

We should adopt that model in order to experiment how different policies interact with the economy. If we want to reduce the amount of taxes that an employer pays for one employee from 60% to 45% or less, or to reduce the amount of the income tax, than we need to observe this phenomenon on a small scale, not to implement it and observe it on the whole country.

In this paper, four counties have been chosen, Satu Mare, Bihor, Arad, and Constanța, the first three counties being picked up based on their proximity to the Schengen area, and/or on their infrastructure, plain terrain, and a qualified and skilled labor force. Constanța, the only one that resembles with its Chinese counterparts, has been taken in consideration because of its capabilities of shipping products right away as they are manufactured.

If we want to reduce the social contributions, the income tax, health tax, place a moderate tax on land and buildings, offer free terrain, or whatever measure that attracts FDI, we should do it first on a small scale, and then apply it on a bigger one.

If these zones are created in these four counties, we should expect a surge in FDI as we have seen in the four Chinese counterparts. Production will grow, exports will surge, workers will be needed, salaries will increase, infrastructure spending will go up based on new income, and with this, the competitiveness of these regions will register the same effect.

Lets not forget the demographic impact that these four regions will have, especially when we talk about regional migration. Taking in consideration that large areas are interconnected, being not that far away one of another, for example Cluj Napoca is situated only at 150 km from Oradea, having a proper highway between these two cities, a worker can make a trip of one hour onwards and backwards, not three hours like today.

If some measures are viable, they should be adopted at national level, in order to decrease the disparities that exist among counties and regions. But I feel that once the counties feel independent from the state, they will search for more authority and power, transforming Romania from a republic, to a federation.

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POVERTY AND LIVING ROMA. POOR NEIGHBORHOODS IN ROMANIA AND HUNGARY

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The first part of our paper is a theoretical debate of the most important research results concerning the Roma population in Romania and Hungary, while in the second part we proceed to the interpretation of our own empirical research data.

Methodologically, our research is based on sociological survey. Data concerning socio-occupational characteristics of Roma communities have been collected by means of a questionnaire based survey of active aged Roma population from Oradea and neighbouring rural localities in Romania and Hungary (Oșorhei, Ineu de Criș, Biharkeresztes, Told).

The paper concludes with policy recommendations aimed at the members of the target group.

This paper presents the outcome of an euro-regional comparative research conducted in 2010 in two neighboring border areas: Bihor (Romania) and Hajdu-Bihar (Hungary), financed by a grant awarded by the European Regional Development Fund. The first part of the paper includes a theoretical overview of the most important research results concerning the Roma population in Romania and Hungary, while in the second part we proceed to the analysis of our own empirical research data. Methodologically, our research is based on the sociological survey. Data concerning socio-occupational characteristics of Roma communities have been collected by means of a questionnaire based survey of active aged Roma population from Oradea and neighboring rural localities in Romania and Hungary (Oșorhei, Ineu de Criș, Biharkeresztes, Told). Due to the fact that data set is very large and complex we will focus on data concerning living conditions in poor neighborhoods.

1.1.Introduction

The Roma (or Gypsies) are a unique minority in Europe. Unlike other ethnic groups, they have no historical homeland and live in almost all countries in Europe and Central Asia. The origin of the Roma in Europe is widely debated. Historical documents indicate that Roma have migrated in waves from northern India to Europe between the 9th and the 14th century. On the other hand, historical studies show that the Roma were very much persecuted by the majority from the very beginning of their arrival in Europe. The measures taken against

them ranged from hanging, drowning, reddening with iron, imprisonment, enslavement, deportation. The Western Europeans were more drastic in their measures against the Roma than the more permitting Turks, who invaded the South-East and parts of Central Europe²⁶. Perhaps this explains even in today Europe a greater concentration of Roma in the Central and Eastern European countries.

Roma is an extremely diverse population with multiple subgroups based on language, history, religion and different occupations. While in some countries Roma are nomadic, most of them in Central and Eastern Europe have become sedentary – some of them in the days of the Ottoman rule and others in the socialist period.²⁷

Estimating the size of the Roma population is a complicated issue. Census data are intensely disputed as many Roma do not identify themselves as Roma in surveys. On the other hand, the official figures, the results of the population censuses are contradicted by other studies which aimed to estimate the number of Roma population²⁸. Some estimates show that the number of Roma increased up to 6 and 9 percent in Bulgaria, Macedonia, Slovakia and Romania. These percentages may increase for the foreseeable future because of the difference between fertility rates in populations of Roma and non-Roma. Romania has the largest Roma population in Europe, estimated figures ranging from 1 to 2 millions. A large Roma population (between 400,000 and 1 million) lives in Hungary, Bulgaria, Slovakia, Turkey and Serbia. The largest population of Roma in Western Europe is in Spain (about 630,000), France (310,000), Germany (70,000) and Italy (130,000). In total between 7 and 9 million Roma live in Europe - a population equal to that of Sweden or Austria.²⁹

The Roma population in Romania and Hungary has some special characteristics compared to other minorities. By tradition, it is a population with a low social status, typical object of comparison as the poorest category of population and strongly exposed to discrimination and social exclusion. To these one should add other features, such as failure of modernity or difficulties of identifying the exact size of the Roma population.³⁰

Historically, the Roma population had a disadvantaged position over the centuries. While by the end of the XIXth century, Roma were slaves on the estates of Romanian or Hungarian nobles (Transylvania), in the last two centuries, this population has experienced a period of emancipation, have been offered equal rights with the majority population and small land plots. In the socialist period the situation of Roma populations improved to some extent. These policies resulted in a relative improvement of their education level and the beginning of their involvement in the formal economy. However, the price they paid was forced integration and a loss of cultural specificity.³¹

The post-communist transition has caused many changes in the life of Roma communities. Some Roma even regret the socialist regime; even if they were not recognized as a national

²⁶ Fraser, Angus, 2010, **Țigani**, Editura Humanitas, București, p. 190

²⁷ Ringold, Dena, Orenstein, Mitchell, Wilkens, Erika, 2003, **Roma in an Expanding Europe. Breaking the Poverty Cycle**, The World Bank, p.1

²⁸ Preoteasa, Ana Maria, 2003, **Prezentarea unei cercetări internaționale cu privire la starea romilor în Europa Centrală și de Est**, in Calitatea Vieții, XIV, no.2, p.265

²⁹ Ringold, Dena, Orenstein, Mitchell, Wilkens, Erika, 2003, **Roma in an Expanding Europe. Breaking the Poverty Cycle**, The World Bank, p.1

³⁰ Voicu, Mălina(coordinator), 2007, **Nevoi și resurse în comunitățile de romi**, Soros Foundation Romania, București, 2007, p.7

³¹ Ibidem

minority, the assimilation policies were offering them at least some degree material safety. In contrast, the post-socialist period was full of changes and paradoxes for Roma. On one hand, it allowed the recognition of Roma identity, politically and culturally, on the other hand, it emphasized the economic and social marginalization and rejection of this community.³²

In the present context, the Roma issue is not a simple one. Several economic and social factors are combined here; while the ethnic dimension of the problems can not be ignored, it stems to great extent from the crisis crossed by Romania and Hungary during the transition period, which has a particular effect on the Roma population. Viewed in economic terms, we can say that Roma are the poorest population in Romania and Hungary, perceiving the economic vulnerability and social exclusion as their main problems.³³ The poverty level of this ethnic group is a combined outcome of several factors. As Marian Preda stated, poverty can be considered only a specific dimension of social exclusion, the financial one³⁴. Other forms of exclusion are also involved: exclusion from the democratic and legal system, labor market exclusion, exclusion from the state welfare system, exclusion from the family and community system.

According to recent research, the causal factors seem to have mainly an individual determination and to a certain extent, a cultural one, pointing to self-exclusion³⁵. The economic vulnerability of Roma is thus caused by a complex of factors such as low educational and vocational training, the precarious position on the labor market, the great number of children in Roma families, their discrimination by the majority group and the involvement in the informal economy. One can speak of a vicious circle in the case of the Roma. Being poor in the vast majority, they do not have the resources to complete their educational and professional training. Many of them not having jobs, they get involved in the informal economy, or immigrate to western countries.

1.2. Roma in the sociological literature

The sociological literature on the problems of the Roma community is rich. The research developed on the Roma communities is achieved both by quantitative and qualitative methods. Both approaches appear to have pros and cons. Quantitative methods are useful to illustrate comparisons between the populations of Roma and non-Roma, both at a national and a European level. On the other hand, information on Roma can not be regarded as the most reliable data and they are also difficult to be obtained. Due to statistical problems related to ethnic self-identification, the quantitative research has serious limitations. However, the quantitative data provide possibilities for comparative analyses of welfare measures that can improve the elaboration and implementation of social policies.

While quantitative research shows that Roma poverty is distinct, it does not provide an adequate basis for understanding the specific dynamics circumscribing Roma economic vulnerability. In this field of study, qualitative research might have a higher effectiveness in identifying social processes, mechanisms and relationships between variables that are

³² Pons, Emanuelle, 1999, *Țiganii din România*, Editura Compania, București, p. 137

³³ Voicu, Mălina(coordinator), 2007, *Nevoi și resurse în comunitățile de romi*, Soros Foundation Romania, București, p.7

³⁴ Preda, Marian, 2002, *Politica socială românească între sărăcie și globalizare*, Editura Polirom, Iași, p. 101

³⁵ Ibidem, p. 168

difficult to be emphasised by using exclusively quantitative methods. Qualitative research, however, has also certain disadvantages. It tends to focus on just one specific issue, focusing on a limited number of factors. That is why a combination of quantitative and qualitative methods can provide a complementary set of perspectives leading to a better understanding of social problems and policies.³⁶

A remarkable comparative research project on the Roma community in six Central and Eastern European Countries (Hungary, Bulgaria, Slovakia, Poland, Russia and Romania), both quantitative and qualitative, has been conducted between 1999 and 2000, coordinated by Ivan Szelenyi (Yale University).³⁷ Some interesting methodological conclusions for the study of Roma communities have been drawn. During one year, the researchers analyzed between 10,000 and 19,000 Roma households. In the same time a questionnaire was applied on an oversample of Roma in Bulgaria, Hungary, Poland and Romania. The researchers have also made some qualitative studies of communities in extreme poverty in these countries.

In 1993 people in all countries experience a similar deterioration in living standards compared to 1988. Since 2000 the trend is a decrease of the poverty in countries that have implemented more rigorous liberal reforms, for instance Hungary and Poland, as well as in countries with slow progress to the model of liberal capitalism.³⁸

The study revealed that transnational differences are as important as the ethnic differences. For example, Roma in Hungary are slightly poorer than non-Roma in Bulgaria. In all the countries, Roma are overrepresented in the poorest deciles of population. However, most of the very poor people consist of non-Roma. There is also a significant category of Roma who has a good enough standard of living in all the countries mentioned. The conclusion of the researchers is that the Roma who have successfully maintained the traditions were more likely to avoid the trap of poverty than those assimilated to the fringes of society.

One of the most quoted qualitative studies in the international literature studying the Roma is the English anthropologist Michael Stewart's, presented in "*The Time of the Gypsies*" (1997), a remarkable social ethnography of the Roma in the Hungarian town of Harangos, located at north of Budapest, a survey using the method of participatory observation. The English anthropologist developed the research through a field work conducted during 18 months between the years 1984 and 1985. During this period he lived with his wife and children in an area called "*The third class*" in a Roma neighborhood of the town, a town where, according to a census of that time, around 1000 Roma lived.

Until 1989 the official communist policy was to integrate the Roma in the "leading" class, the communist working class. However, Roma have found ways to maintain their own identity. Michael Stewart's book examines the refusal of Roma to abandon their lifestyle and accept assimilation to the majority population. Forget, Michael Stewart warns us early in the book, about the carefree freedom of caravans and campfires. These men lived hard and brutal sometimes. They dreamed of richness gained through gambling and stealing horses, but in reality were poor as a church mouse. They lived in ghettos, but their names and law argued that the Roma are working people, often working for low wages in industry and

³⁶ Ringold, Dena, Orenstein, Mitchell, Wilkens, Erika, 2003, **Roma in an Expanding Europe. Breaking the Poverty Cycle**, The World Bank, p.4

³⁷ One outcome of this research is a work entitled *Poverty, Ethnicity and Gender in Transitional Society* (2002).

³⁸ Ibidem, p.9

collective farms. And despite the marginal position and sufferings they endured they preserved the dignity and the joy of being Roma.³⁹

Michael Stewart's book describes the cultivation, celebration and reinvention of the cultural difference and diversity of some people deemed by their superiors too stupid and uncivilized to have their own culture. Since the beginning of the Second World War there were two dramatic ways to solve the "gypsy problem". Between 1941 and 1945, the Nazis exterminated about 500,000 Roma in their effort to clear the "degenerated" and "antisocial" way of life. Between 1957 and 1989, said Stewart, a different type of anti-Gypsy campaign took place in the Eastern Europe. Nobody was made prisoner, left to die alone. Repression and discrimination did not exist in the plan of the communist reformers. But the final goal was strikingly similar to the fascist one, the Gypsies disappearance. The East European communists' task in 1957, says the English anthropologist, was really Herculean: the cultural assimilation of millions of people who had suffered discrimination for centuries. The former Yugoslavia being partially an exception, Gypsies had been subjected to a systematic campaign of assimilation. Czechoslovakia, Poland, Soviet Union, Romania and Hungary pursued almost identical policies.⁴⁰

The English anthropologist notes, however, that, ironically, far from being assimilated in the working class, the problems associated with the Gypsies became larger as the campaign of assimilation continued. Stewart noted that in the Hungary of the period the research was held, the Gypsy issue was given greater importance than ever, since the 1930s. Two sources led to this attitude. First there was a dramatic gap between the theory of social inclusion and the reality of increasing social differentiation. The Communists told to the non-Roma that they had done much to improve the lives of Roma and their disappearance could be expected soon. But there was little evidence in this case. Two: the policies reproduced in a new form the old ideas about gypsies being "others". The economic and social system entered into crisis in 1980s, the Gypsies otherness became clearer and more ominous.

The Romanian literature on the Roma issues is related especially to the researches carried out by the Institute for Quality of Life in Bucharest.⁴¹ The work coordinated by Elena and Cătălin Zamfir, *Gypsies between worry and neglect* (1993) can be regarded as the first and perhaps the most extensive analysis of the problems of Roma in Romania, based on a quantitative research on a representative sample of Roma households. In this book a number of issues concerning the Roma are considered, such as housing, education, professions and occupations, family and living conditions of the children.

Nine features are invoked - social-economic trends of the Roma population - which have an overwhelming effect on their their opportunities: decreased access to jobs offered by the modern economy, labor market niches that Roma have a special access (traditional professions, businesses on their own, unskilled jobs), precarious and uncertain nature of many economic resources traditionally exploited by the Roma, marginal or even deviant

³⁹ Michael Stewart, 1997, **The Time of the Gypsies**, Westview Press, Colorado, p. 1

⁴⁰ Ibidem, p.5

⁴¹ After 1990, a number of research papers on this area appeared: Cătălin Zamfir and Elena Zamfir, *Gypsies between worry and neglect* (1993), Cătălin Zamfir and Marian Preda, *Roma in Romania* (2002), Marian Preda, *Romanian social policy between poverty and globalization* (2002), Manuela Stănculescu and Ionica Berevoiescu, *Poor as a church mouse, looking for another life* (2004). In the work *A new challenge: the social development* (2006), coordinated by Cătălin Zamfir and Laura Stoica, there is a chapter signed by the sociologist Mihai Surdu on school segregation and schools with Roma students.

exploitation of the community, increasing crime, its organized character and violence, antagonizing relations between the majority population and Roma population, the number of children, poor housing conditions and migration to cities and the risk of “pockets” of poverty and chronic juvenile with a strong ethnic coloring. The conclusion of the whole analysis is that the Roma population faces serious social and economic crisis. The traditional life strategies provide only the chance of survival in this crisis, but not for its overcoming.

1.3. Living in poor areas

The analysis of the poor areas as living spaces is an integral part of any discourse on new poverty and its focus on clearly defined territories. To validate an area as poor assumes the presence of deprivation concerning the housing and the prevalence of precarious living conditions. In this regard, the poor areas are described as areas with no or poorly equipped facilities, poor natural environment, the house in an advanced state of degradation and poorly provided with urban facilities. The specific phenomena for the poor areas are housing insecurity and overcrowded housing.⁴²

There are several important analyses on living in poor areas in the international literature. In the West sociologists are primarily concerned with the poor areas of the urban, often called ghetto or banlieue. As William Wilson, an African-American sociologist considers, the concentration of black people in the ghetto is the result of the reduced access to employment and socialization. European sociologists such as Loic Wacquant, are adding another element, namely the already mentioned stigmatization of people living in poor areas of large urban agglomerations. The Dutch researcher Eva van Kempen also mentions a fourth factor, the limited access to social rights⁴³.

In connection with the topic discussed, there is a recently completed European project coordinated by Ronald Van Kempen, a Dutch urban geographer at the University of Utrecht, entitled *Large Housing Estates in Europe: Good Practices and New Visions for Sustainable Cities and Neighborhoods*. The main objectives of this project (which includes case studies in cities in Hungary) were to identify the social and economic changes that took place in the social world of the blocks built after the Second World War and the development of some items which proved to be important in the success or failure of the social policies applied to the areas of blocks⁴⁴. The researchers concluded that these areas of blocks concentrate people with modest incomes and a low stock of social cultural and political capital. The block areas are also characterized by a higher rate of unemployment and crime and a higher level of social exclusion. Although the researchers found that the block areas are in a state of failing all over Europe, there are also situations where deprivation, bad construction and management do not result in revocation. Second, East-West differences are noticed in terms of social cohesion and solidarity of the inhabitants of the blocks in the projects of rehabilitation of buildings and layout of the green spaces surrounding these buildings.

⁴² Stănculescu, ManuelaSofia, Berevoescu, Ionica, 2004, **Sărac lipit,caut altă viață!**, Editura Nemira, București, p.128

⁴³ Van Kempen, Eva, în Marcuse, Peter și Van Kempen, Ronald, 2002, **Of States and Cities**, Oxford University Press, p.245

⁴⁴ Murie, Alan, Siedow-Knorr, Thomas, Van Kempen, Ronald, 2003, **Large Housing Estates in Europe.General Developments and Theoretical Backgrounds**, Utrecht University, p.11

With regard to housing problems in the poor areas of Romania (most papers on this topic focusing on the housing problems of Roma communities), I should mention the work of researchers like Cătălin and Elena Zamfir (1993), Cătălin Zamfir and Marian Preda (2002), Manuela Stănculescu and Ionica Berevoescu (2004), Cătălin Berescu and Mariana Celac (2006) or Cosima Rughiniș (2008). The main issues considered by these works are: poor housing, housing density, documents of the buildings and land ownership and access to utilities. The main findings of the authors are the significant differences between the statuses of Roma and non-Roma, and also the significant differences between rural and urban areas, the Roma living in the rural environment having poor living conditions. We will see to what extent some of these findings could be verified on the cases studied by us in Bihor and Hajdu Bihar.

1.4. Roma in Bihor and Hajdu-Bihar

1.4.1 Bihor County

Bihor County is the third in Romania according to the percentage of the Roma per population (5.01%), after Mureș County (6.96%) and Sălaj County (5.01%). There are around 30,200 Roma in Bihor County. Most of them live in Oradea, 6,000 to a total of 206,000 inhabitants. The most concentrated Roma communities are in Săcuieni (3,700), Tinca (2,500), Diosig (1,500), Batăr (1,500), Sânmartin (1,070), Aleșd (1,000), Suplacu de Barcău (900) and Ineu (850).

Roma, statistically a minority, are 89% of those who abandon school in Bihor County and, according to police estimations, 8 of 10 offences are committed by Roma. Only 10% of the Roma are employed and only 50% of them have an identity card. These are some statistical data which illustrate a dramatic reality of this minority. As in the other parts of Romania, the problems the Roma have to face in Bihor are the low level of education, the dropout, the precarious position on the labor market, living and health problems.

In recent years, two qualitative studies have been conducted on the Roma in Bihor: The first study (Olah, 2004) focused especially on the dropout, stressed that education is a major factor for the modernization of the Roma's life, maybe the decisive factor, and that the low level of education is strongly correlated with the precarious integration of the Roma on the labor market and with the juvenile delinquency. An important conclusion of the study is that Roma elite with high education should be the solution for the change of the dramatic situation of the Roma communities⁴⁵. The second study (Olah-Baltatescu 2008) focused on the problems of the Roma in Oradea⁴⁶. The data analysis confirmed that the problems of the Roma are related to:

- improper conditions of living
- extreme poverty
- the precarious health (especially contagious diseases like TBC)
- lack of professional training, the precarious position on the labor market, low incomes due to the lack of professional training
- the precarious education.

⁴⁵ Olah, Șerban, 2009, **The School Dropout in Bihor county. A Qualitative Approach**, Revista Universitara de Sociologie, Craiova, Romania, Year VI, nr.1(11), p.101

⁴⁶ Olah, Șerban, Băltătescu, Sergiu, 2008, **Nevoi și servicii sociale în comunitățile de romi. Studiu calitativ în municipiul Oradea** in Revista de Asistență socială (nr.3-4), București, ISSN 1583-0698,p.34

The initiative of the Romanian Government in 2000-2004 to create some special places for the students of the Roma communities seems to be efficient. There is also needed a more active involvement of the NGOs, Town Halls, leaders of the Roma communities.

The main reasons of the dropout in Bihar are: poverty, low level of education of the parents in the Roma community, the parents' lack of interest for school problems, family life disorganization, the tradition in the Roma community, the wrong attitude of some teachers towards some pupils, especially Roma, the low number of school psychologists in the schools of Bihar and the friends of the pupil.

Both mentioned research papers are underlining the necessity of continuing the social projects for the Roma, developing the NGOs which carry out such projects and forming the elite of the Roma community who will support the disadvantaged communities by involving them in such projects.

1.4.2. Hajdu-Bihar County

In Hajdu-Bihar, 10 836 persons declared Roma identity at the latest census (in 2001), comprising 5,7 % of the total Roma population of Hungary. The share of Roma within the county's total population is 2 %. However, the number of those who live a specific Roma way of life is much higher. A nationwide representative survey conducted by the Hungarian Statistical Office in 2003 found that in Hajdu-Bihar county 44 200 persons (8, 2% of the total population) are assigned a Roma (Gypsy) identity by their immediate neighborhood. According to this indicator, Hajdu-Bihar is the county with the fifth largest Roma population in Hungary.

The Roma population of Hajdu –Bihar country is confronting to a large extent with the same problems as their co-ethnics at the other side of the border:

- Comparatively very high rates of fertility combined with high rates of mortality, which results in a rather young age structure compared to that of the county's total population
- Much lower educational level than the county average
- Extremely reduced level of economic activity/employment

A survey of 200 Roma families conducted by the Department of Sociology at the University of Debrecen⁴⁷ found that the rate of Roma employment is six times lower (in case of female population seven times lower) compared to the general rate of employment. Most of the Roma subjects questioned during the survey expressed their desire to work, but complained of lack of job opportunities.

Beyond this general image, however, a rather perceptible generation-related differentiation has been observed. Members of the middle aged generation who had been occupied in economic activities during communist times are more likely to be employed today as well, compared to the members of the new generation socialized after 1989, who tend to prefer social benefits instead of work. Most of them never had any legal job.

As far as perception of the employers' attitudes is concerned, 72% of the respondents said they never experienced any discrimination while looking for a workplace, however 26% of those questioned indicated that they were not hired due their belonging to the Roma population. Among the surveyed families 40% have some links with agriculture: 18% is

⁴⁷ Beres, Csaba, 2004, **A Hajdu-Bihar megyében élő Roma lakosság helyzete.**
http://www.romaweb.hu/doc.../szociologiai_tanulmany_hbm.doc

cultivating a piece of land, 10 % are occupied with livestock-farming, and 12 % are doing both. In the case they would receive free of charge agricultural land for personal use from the local government, 25% declared that they would not cultivate it, but 72 % said that they would. (41% would produce only for personal use, 31% even for the market)

The survey found that in the preceding month 10% of the respondents had some income originating from occasional, usually agricultural work. One working day in the local agriculture is normally 10 hours long, and the per diem payment stands at 3000 forints (approximately 12 euros). Persons belonging to the poorest strata of Roma population, most of who also suffer of various illnesses, cannot access even this rather modest work opportunity.

On the other hand, the results of research show that in certain conditions occasional work might also become a resource of upward social mobility. For example, in one rural locality (Bagamer), 50 Roma workers employed in agriculture on day to day basis managed to learn how to produce horse-radish, and subsequently used this knowledge in order to start their own small farms, in pieces of land bought from or lent by local inhabitants. A social land-lease program by the county authorities encouraged Roma communities to start agricultural initiatives (such as poppy seeds cultivating or goat –breeding) in other localities as well. Some of these endeavors proved successful, but others failed, mainly due to the lack of Roma agricultural tradition and business skills. In order to maximize the outcome of these programs, members of the Debrecen University research team suggested that as a first step it would be more beneficial and sustainable to focus on producing for family consume, rather than for the market.

1.5. Quantitative Data Analysis

How satisfied are Roma with their life? Is the quality of life of Roma in Hungary higher than that in Romania? Which is the quality of Roma living in the two countries? What is the relationship between the Roma and various items of labor? Which is the level of education and occupational training? What work experience they have in the formal economy? What incomes do they have? How healthy they are? How religious they are?

These are only a few of the starting questions of a quantitative research conducted between January 10 to March 7, 2010 in several urban and rural areas in Romania and Hungary. The research is an integral part of a cross-border project called *Roma Employment*, funded by the European Regional Development Fund This project analyses the integration of the Roma into the labor market in Romania and Hungary and includes both a research component (data collection, a test of occupational skills, applying a questionnaire, conducting focus groups) and practical activities such as organizing two job fairs for Roma (Oradea and Biharkeresztes).

The quantitative research aimed at collecting data on quality of Roma life in settlements with a high density of people belonging to this category: Oradea, Osorhei, Ineu de Cris in Romania and Biharkeresztes and Told in Hungary. It should also be noted that in most of these places Roma live in neighborhoods where they are the majority. We have to mention that interpretation of our research data is based on comparative analysis of two samples of Roma, one from Romania(Bihar county) and another from Hungary(Hajdu-Bihar county). The sampling method used is the non-probabilistic one and involves the snowball principle. Only persons able to work and who are seeking employment, aged between 18 and 55, were selected. In total, a number of 322 subjects answered to the questions.

As collected data are numerous and extremely complex, in thi paper we focus only on those related to living conditions. We aim to realize the presentation and analysis of the full set of quantitative and qualitative data in a volume dedicated to the study of Roma in Romania and Hungary.

In our research we will test several hypotheses which we shall mention below.

H1. There are significant differences between the housing conditions of Roma in Romania and Hungary.

H2. There is a significant relationship between satisfaction with life and satisfaction with housing.

H3: There is a direct link between satisfaction with housing and income.

H4: There is a direct link between the size of dwelling and income.

H5: There is a negative correlation between the number of persons in the household and the income.

1.5.1. Satisfaction with life

How satisfied are Roma with their life? What are the determinants of the satisfaction with life? The research results drawn from the research samples in Romania and Hungary are shown in the tables below.

Table 1. Satisfaction with life at the Hungarian Roma

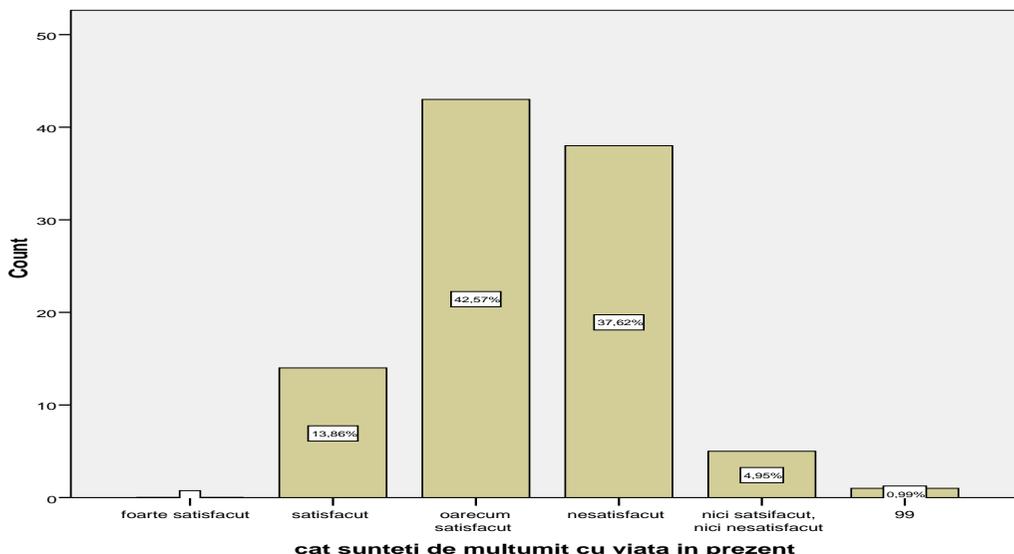
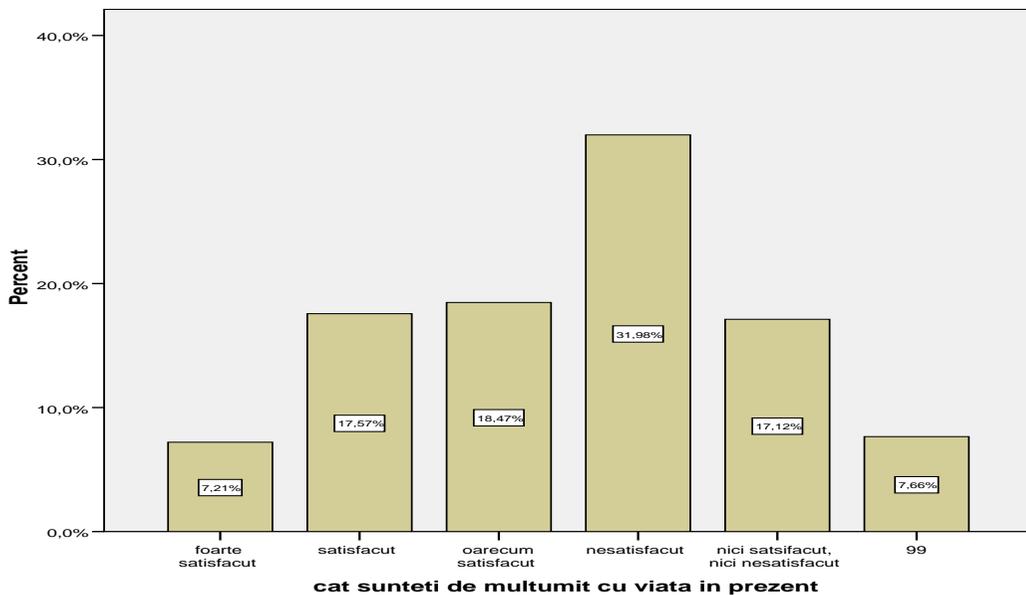


Table 2. Satisfaction with life at the Romanian Roma



—
 We can see in the two tables that on the one hand, the share of very satisfied in Romania is higher (7. 21% vs 0%) and also the percentage of those dissatisfied is lower (31. 98% compared to 37. 62%). Is this happening because of a higher quality of life or the effect of other factors? We will give an answer along the way.

1.5.2 The economic vulnerability of the Roma

A first step we need to make is to see the perception of the Roma on poverty.

Table 3. Income poverty (Roma in Hungary)

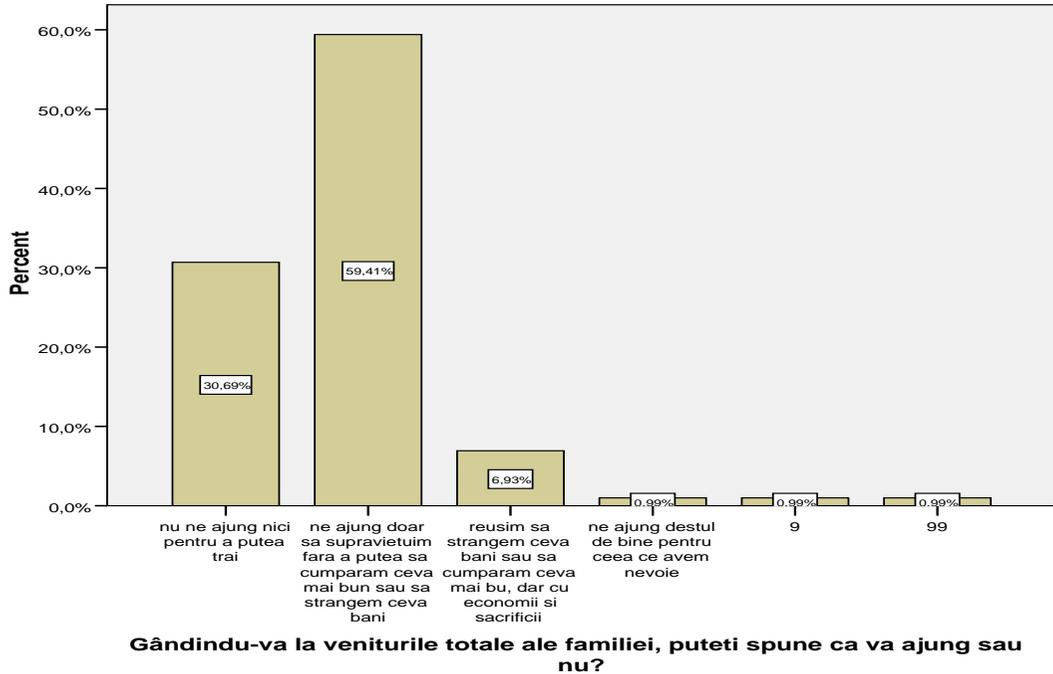
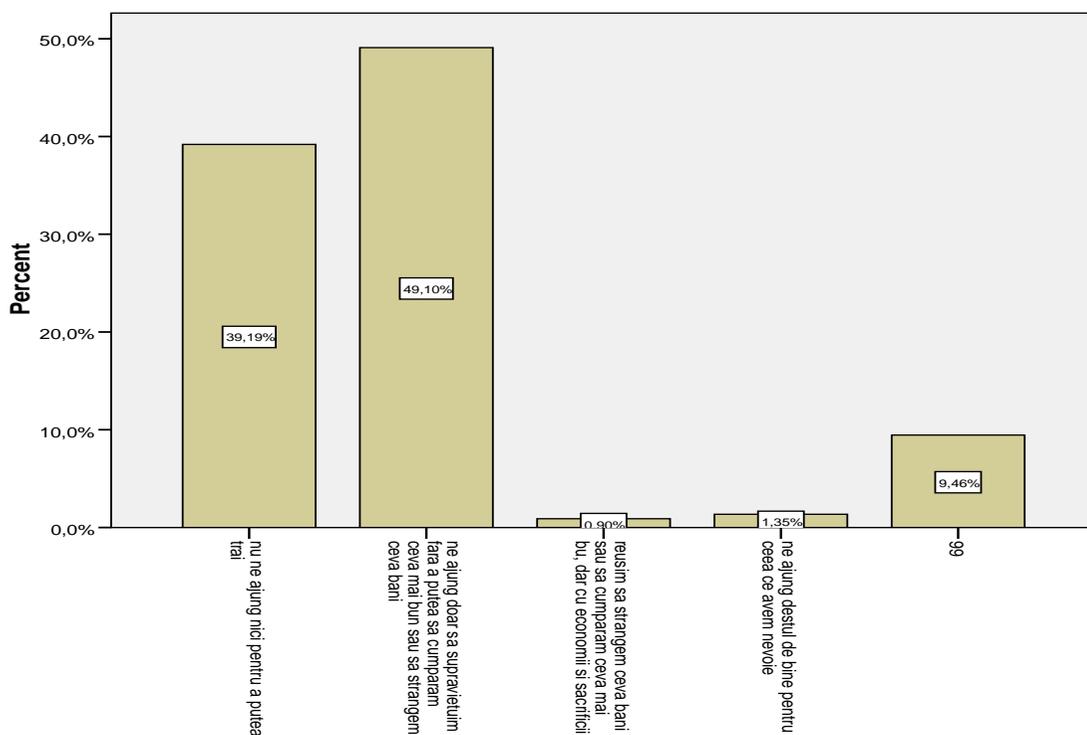


Table 4. Income poverty (Roma in Romania)



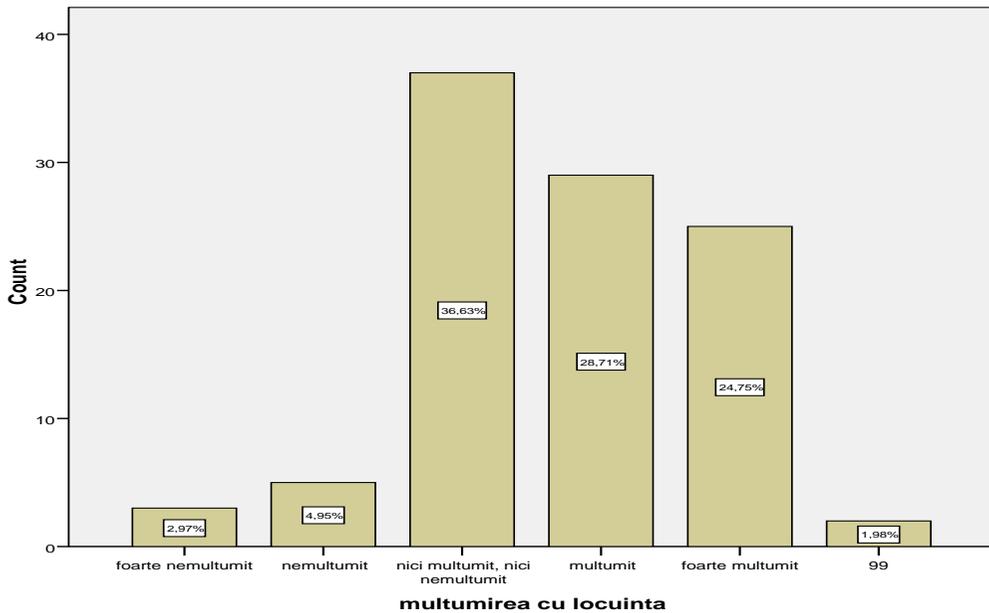
Cândindu-va la veniturile totale ale familiei, puteți spune ce va ajung sau

Comparing the two tables, we can see that the Roma in both countries perceive themselves poor and very poor. If we observe the first two items, the percentages are quit similar in the two countries (about 88. 29% in Romania compared to 90% in Hungary). If we take items 3 and 4 however, the situation is more favorable for the Roma in Hungary (8%) compared to 2. 25% for the Roma in Romania.

1.5.3. Housing conditions

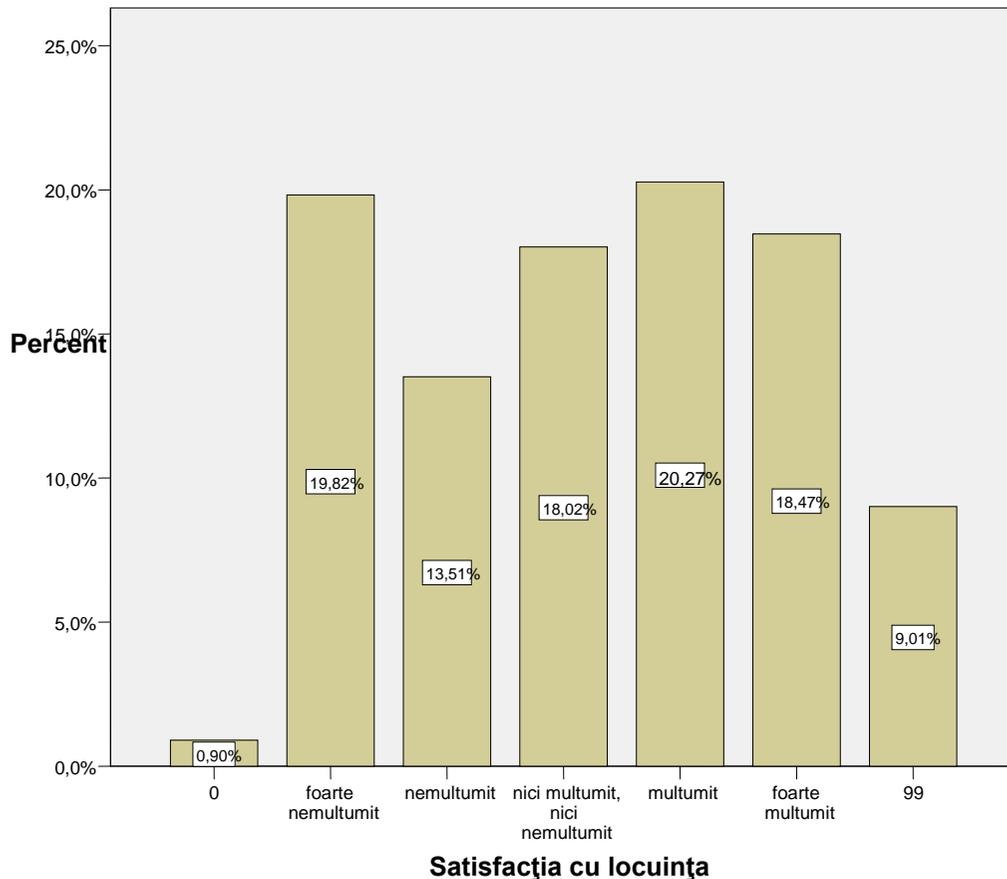
A first step towards interpreting the above mentioned surprising situation is to inquire about the living conditions in the two countries. How satisfied are the Roma with their home? Here are the data from Hungary.

Table. 5 Satisfaction with housing at Roma in Hungary



A question to be raised is how the satisfaction with life is associated with the satisfaction with housing. The regression model applied to the data from Hungary proves a significant combination, but not a strong link between the two variables, as will appear in the data presented in the annex 1.

Table 6. Satisfaction with housing at Roma in Romania



We can notice in the two graphics, on the one hand, that the percentage of satisfied and very satisfied is higher in Hungary (26. 71% and 24. 79%) compared to Romania (18. 47% and 20. 27%, and secondly that the percentage of dissatisfied and very dissatisfied is much higher in Romania (19. 82% and 13. 5%) compared with those in Hungary (4. 95%, respectively 2. 97%). Perhaps this is due to issues such as housing density, housing size, number of rooms and the materials the houses are made of.

One of our assumptions is related to the direct link between satisfaction with life and satisfaction with housing. Making a regression analysis on the data from Romania, we can see that the association between the two variables is significant and, as shown by the data in the table below, the correlation between the two variables is over 0.79, so it is quite strong. The comparison between the two regression analysis (the Romanian and Hungarian cases) shows a stronger association between the data from Romania than in those from Hungary.

In most studies the income seems to be the best predictor of satisfaction with life, so it would be interesting to have a look at the results of the regression model between the income and the satisfaction with life(annex3).The correlation coefficient ($r=0,99$) proves a very strong link between these two variables.On the other hand the regression model between the income and satisfaction with housing (a significant combination and a very

strong connection) proves that in the case of Hungary, the income variable is a better predictor of life satisfaction than the satisfaction with housing(annex5).

Applying the same regression analysis for Romania, we notice a significant association and a stronger link (although the values are very close) than that between satisfaction with housing and satisfaction with life. The differences that arise between the situation in Romania and Hungary are likely due to differences in income between the Roma in the two countries, but also to the way the Roma minority relates to their neighbors. The data presented in this paper show us that the Roma in Romania live in neighborhoods with Roma majority, while the Roma in Hungary live in ethnically rather mixed areas.

Further we proceeded to test the link between housing and income satisfaction in Romania (annex 6). The data demonstrate a significant association between the two variables and also a strong connection. This assumption/hypothesis is valid for Hungary. The data demonstrate a significant association between the two variables and also a strong connection, in the case of Romania. So, this hypothesis is valid for Romania, too. We note in the case of Romania a stronger value of the correlation coefficient, but the difference from the coefficient of Hungary is too small (0. 813 vs. 0. 701) for giving rise to any interpretation.

An important item in many inquiries about housing in poor areas is the state of dwelling ownership.

Table. 7 State of ownership of dwelling (Roma in Hungary)

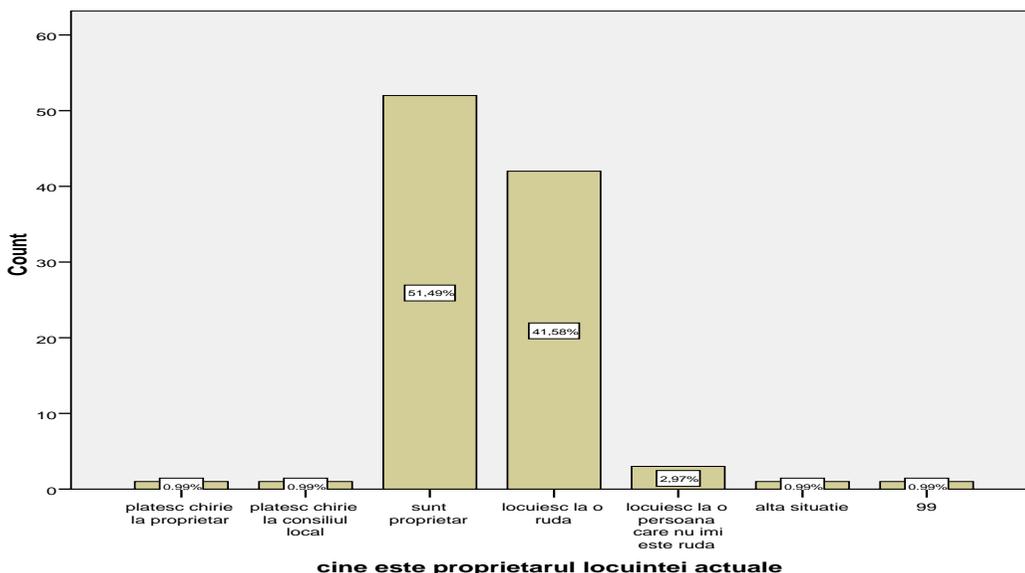
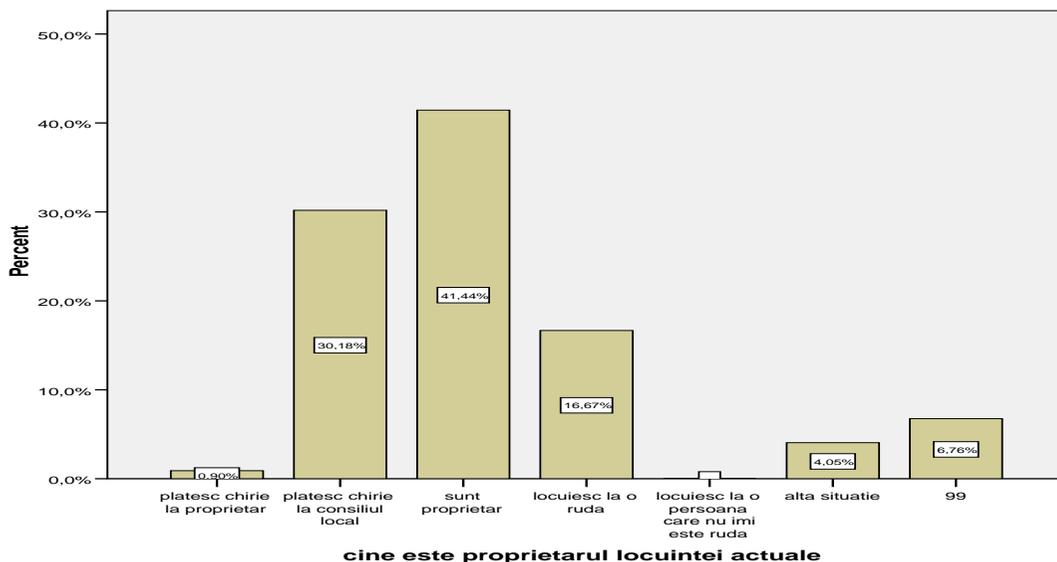


Table 8 State of ownership of dwelling (Roma in Romania)



When comparing the two situations, we can notice some aspects. First, in Romania there are several cases in which they pay rent to the City Council (30.18%) compared to a very small percentage, 0.99% in Hungary. The percentage of those who are owners is more favorable for Hungary, 51.49% compared to 41.44% in Romania, while in Hungary there are many more cases when the family lives at a relative, 41.58%, and when the family lives at persons who are not relatives, 2.97%, compared to Roma in Romania (16.67% and 0%).

Table 9. The materials the houses of the Roma are made of (in Hungary)

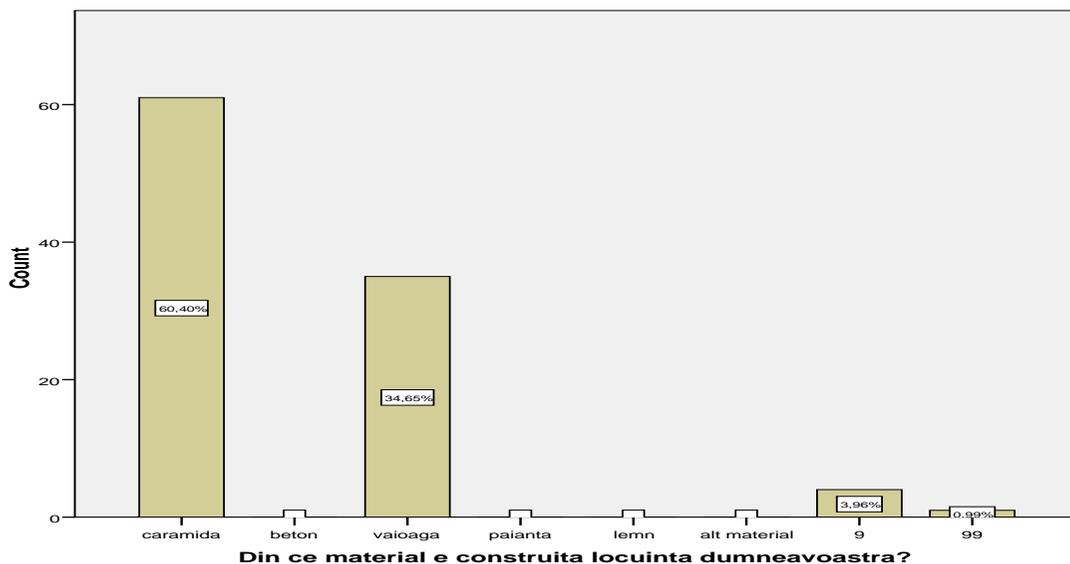
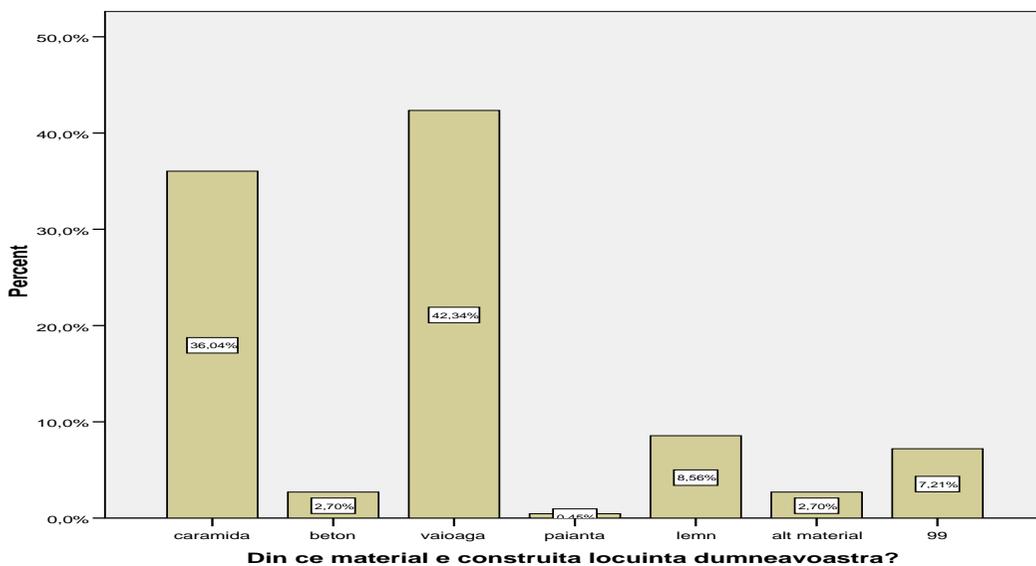


Table 10. The materials the houses of the Roma are made of (in Romania)



We can see in the two graphs that the Roma in Hungary have more modern houses, built mostly of brick (60.40%) and a smaller proportion of adobe (34.65%), while the dwellings of the Bihor County Roma are mainly made of adobe (42.34%), brick (36.04%), but also other materials (wood-8.56%, concrete 2.7%, half-timber work 0.45%).

Table. 11 How many people live in your home? (Roma in Hungary)

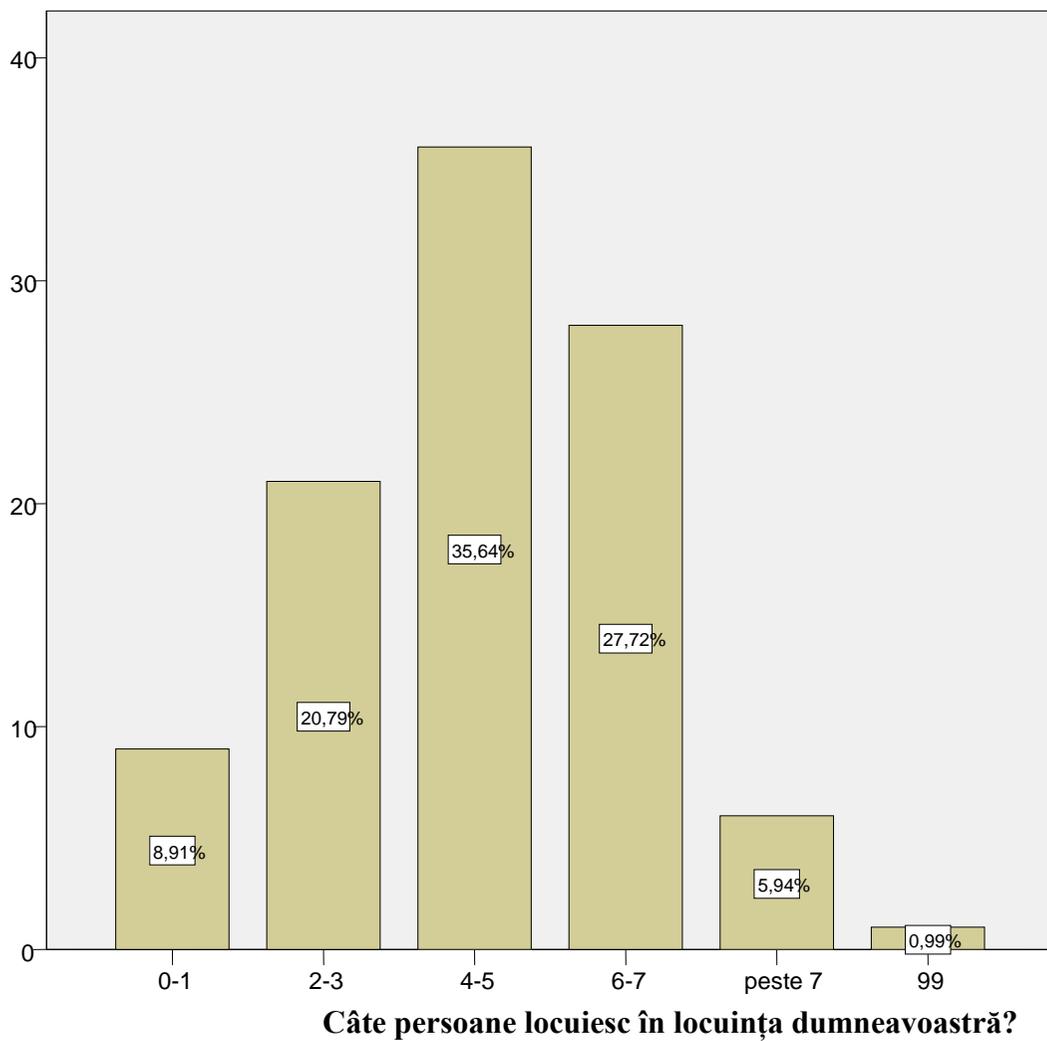
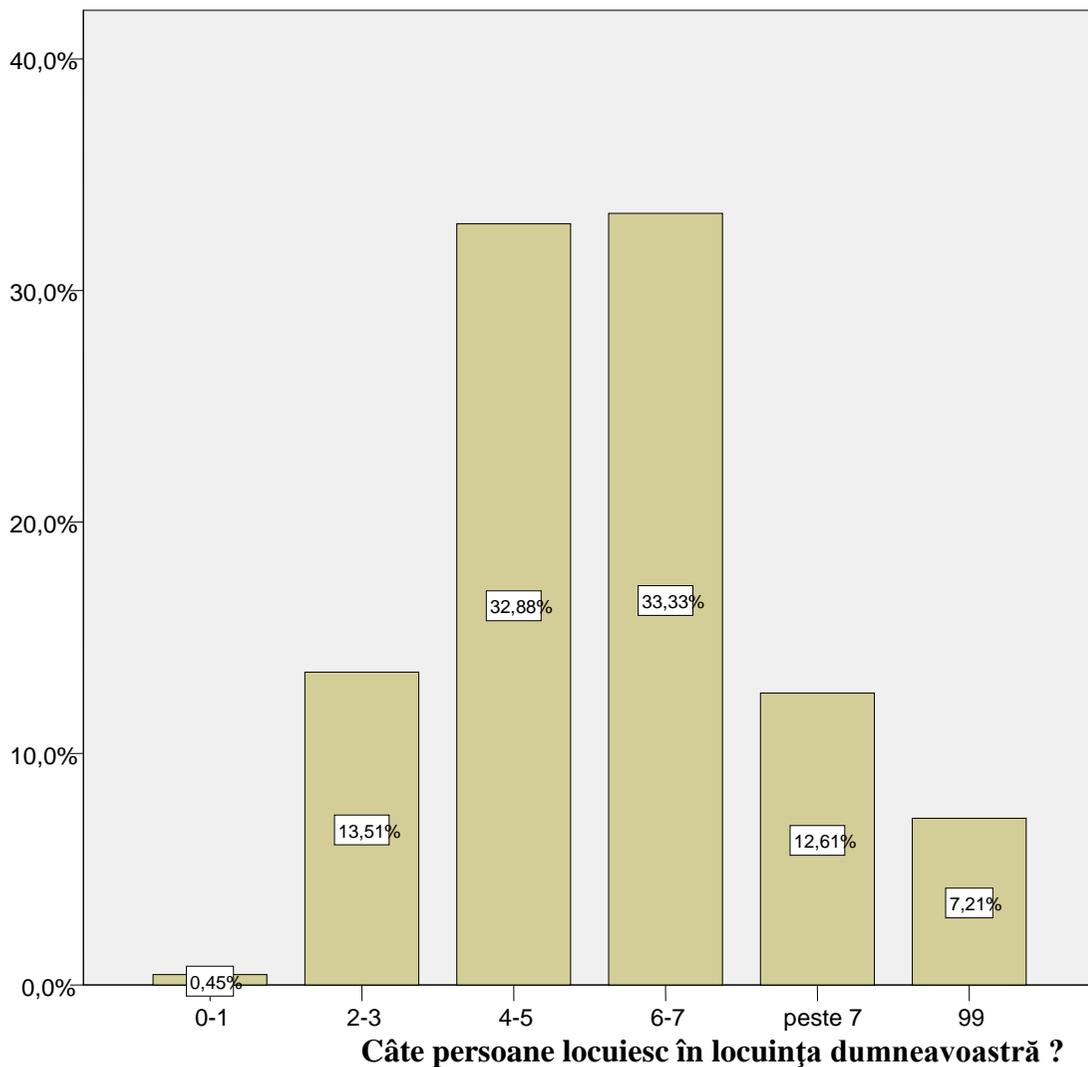


Table 12. How many people live in your home? (Roma in Romania)



We can notice in the two tables that housing density is higher in Romania than in Hungary, as in the case of 6-7 or more than 7 persons in the household, the share of cases in Romania (33.33% and 12.61%) being higher than in Hungary (27.72% respectively 5.94%). On the other hand, for 1 or 2-3 persons in a house, the situation in Hungary is comparatively better (8.91% and 20.79%) than in Romania (0.45% respectively 13.5%). These data should be added to those on the dwelling area, number of rooms and facilities.

Table 13. The size of the Roma dwelling in Hungary

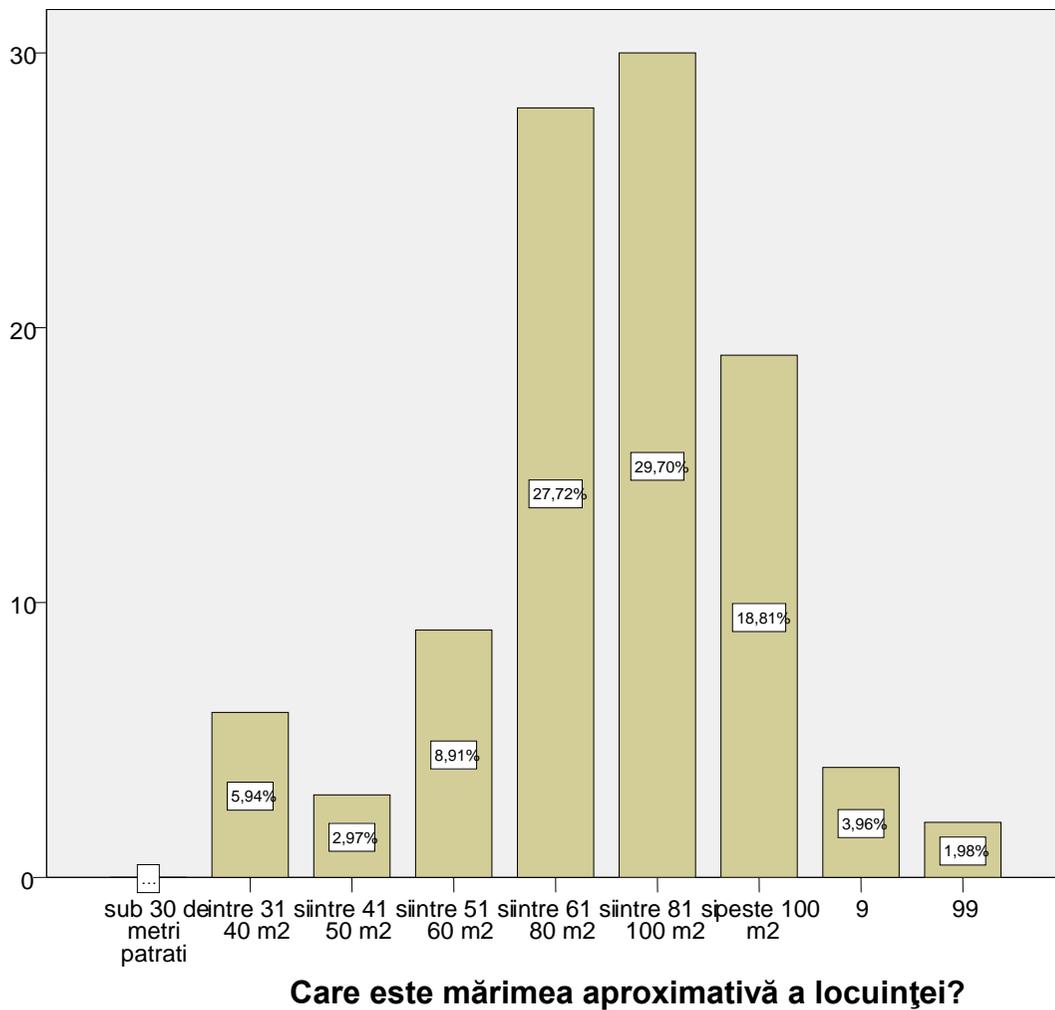
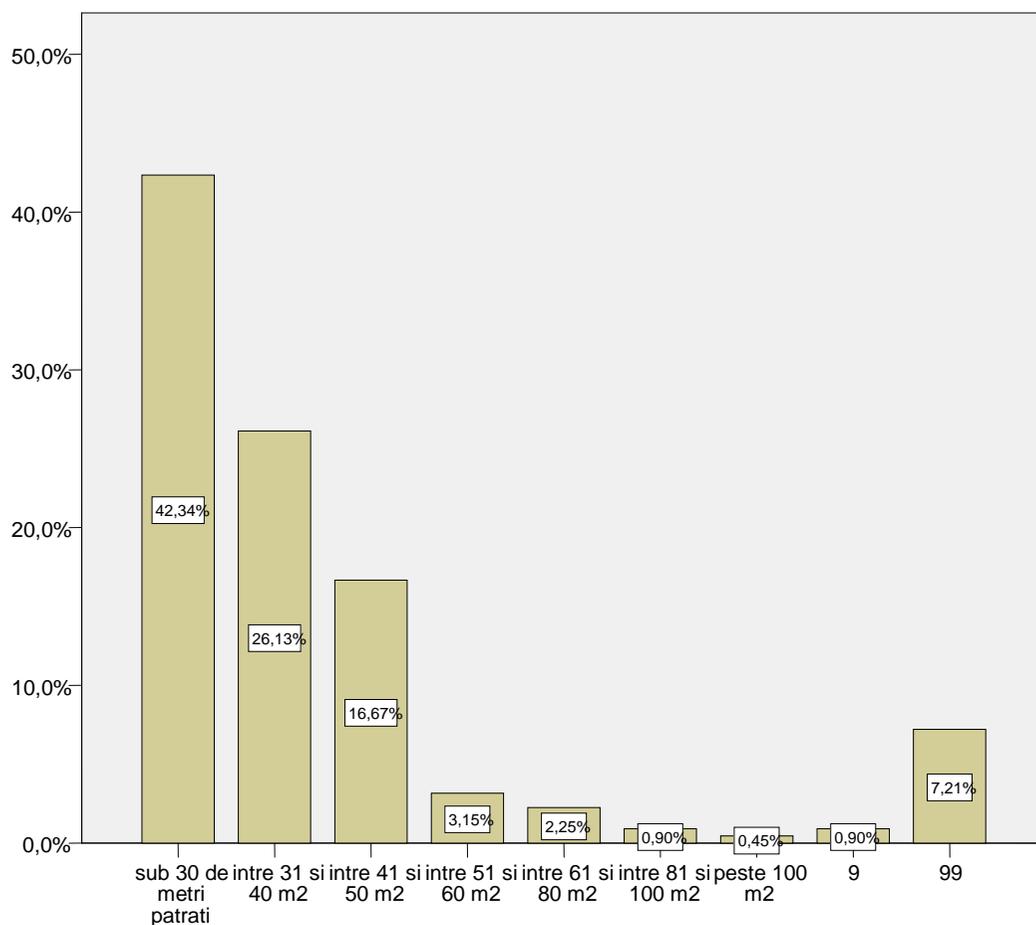


Table 14. The size of the Roma dwelling in Romania



Care este mărimea aproximativă a locuinței?

We can notice in these two tables that while in Romania the housing size is mainly under 60 sq.m., the prevailing housing area is over 60 sq.m. in Hungary. It seems that the size of housing is a significant indicator of the gap which separates housing conditions and more generally the civilizational integration levels of the Roma living in the two countries.

Table 15. How many rooms does your dwelling have? (Hungarian Roma)

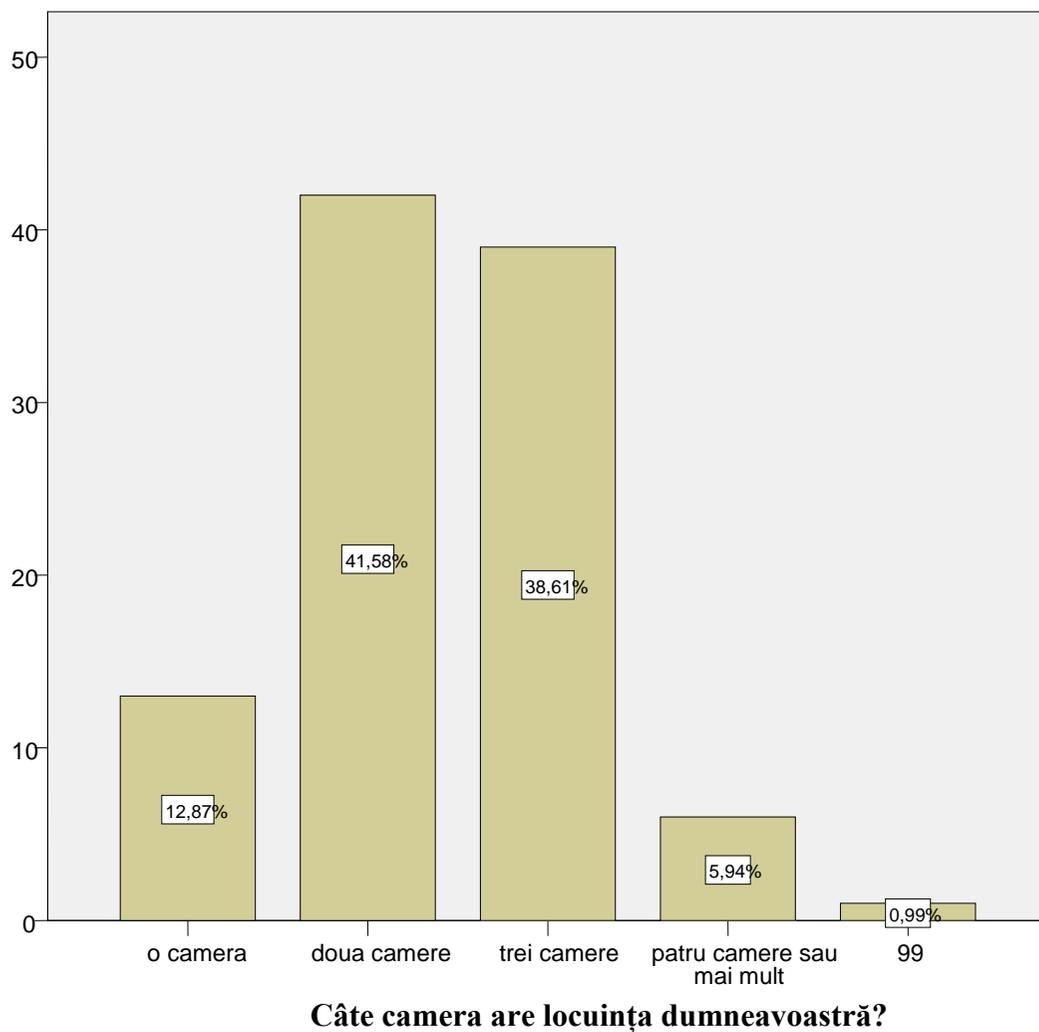
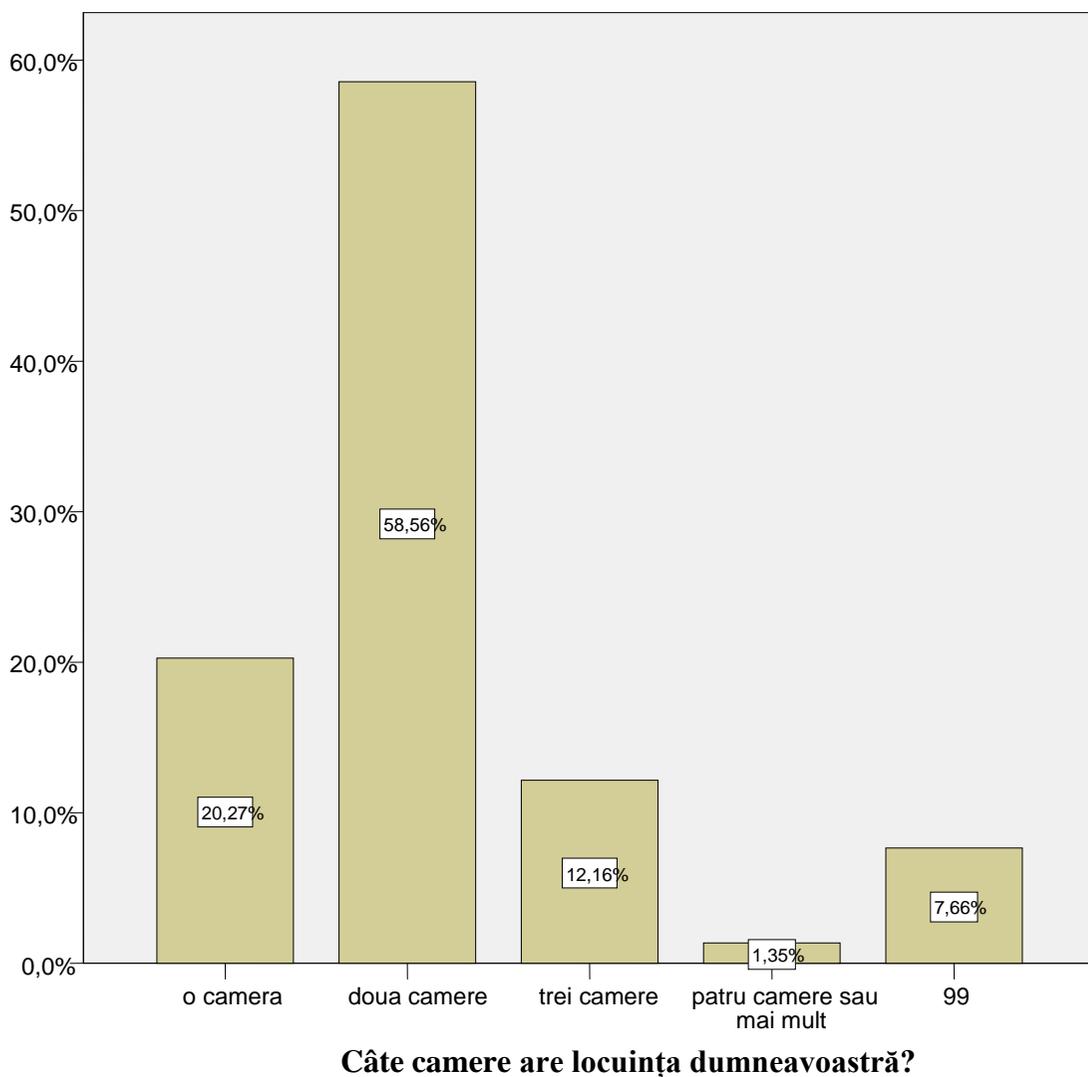


Table 16. How many rooms does your dwelling have? (Romanian Roma)



Again the difference is very high between the two samples. A share of 44.4% of Hungarian Roma live in houses with three rooms or more, while the corresponding percentage in the Romanian sample is only 13.4%. However, the situation is rather different in the case of houses with one or two rooms (79% of Roma in Romania and 64.4% in Hungary). According to the results of regression analysis in both countries there is a significant link between the housing size and income and also between the number of persons in the dwelling and the income (annexes 7 to 10). This outcome denotes the frequent occurrence

of multiple disadvantaging factors(such as precarious living conditions, high number of family members living in small size dwellings and extremely low level of income).

Table 17. Dwellings with bathroom facilities (Hungarian Roma)

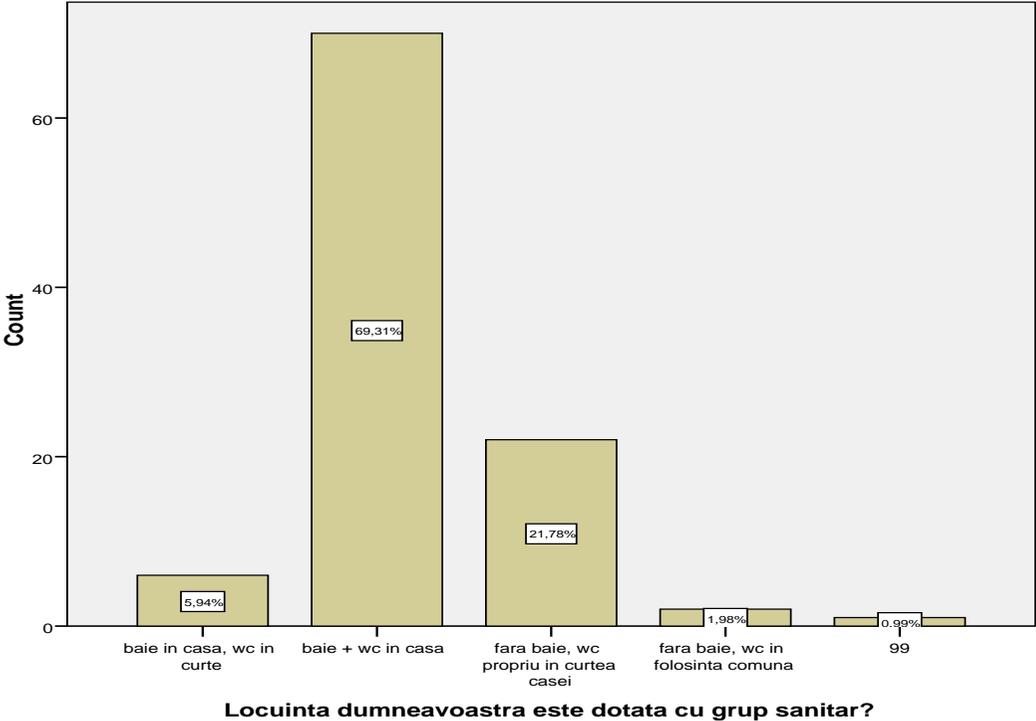
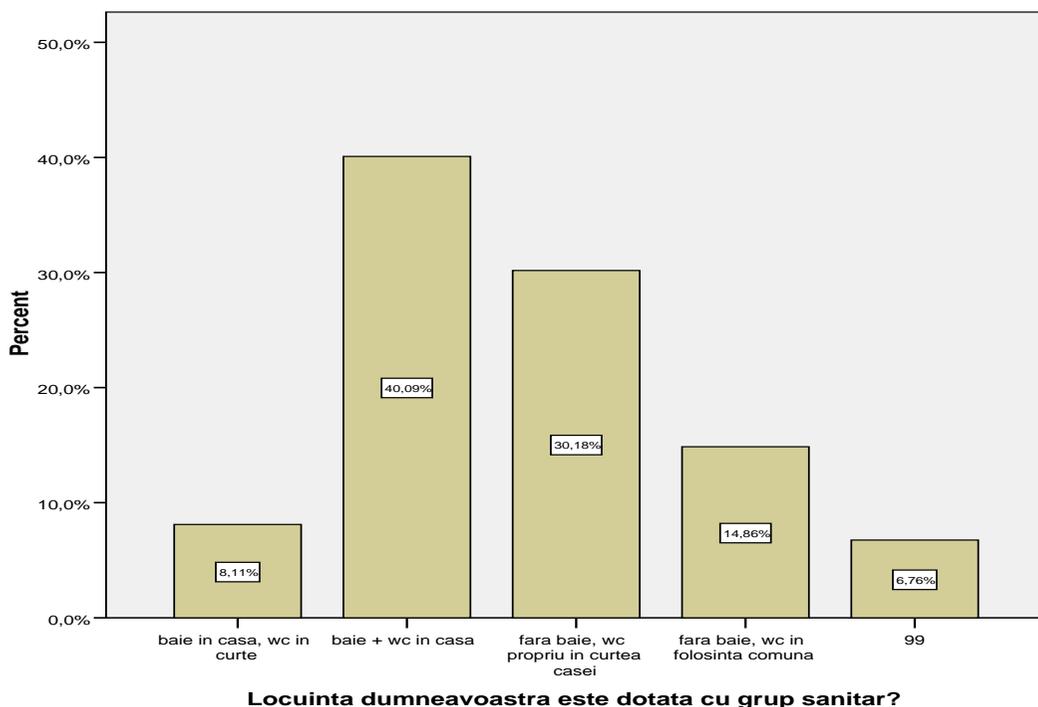


Table 18. Dwellings with bathroom facilities (Romanian Roma)



The two tables show very clearly that the Roma in Hungary have better living conditions than those from Romania. If we compare those with the best conditions, i.e. with bathroom and toilet in the house, the weights of the two samples are 69.31% in Hungary and 40.09% in Romania. If we compare instead those with the worst conditions, in other words those who do not have a bathroom in the house and a toilet in common usage, the corresponding values are 14.86% in Romania, respectively 1.99% in Hungary.

Another important housing facility is the home kitchen. The following two tables illustrate the situation in the two cases.

Table 19. Kitchen in the house (Hungarian Roma)

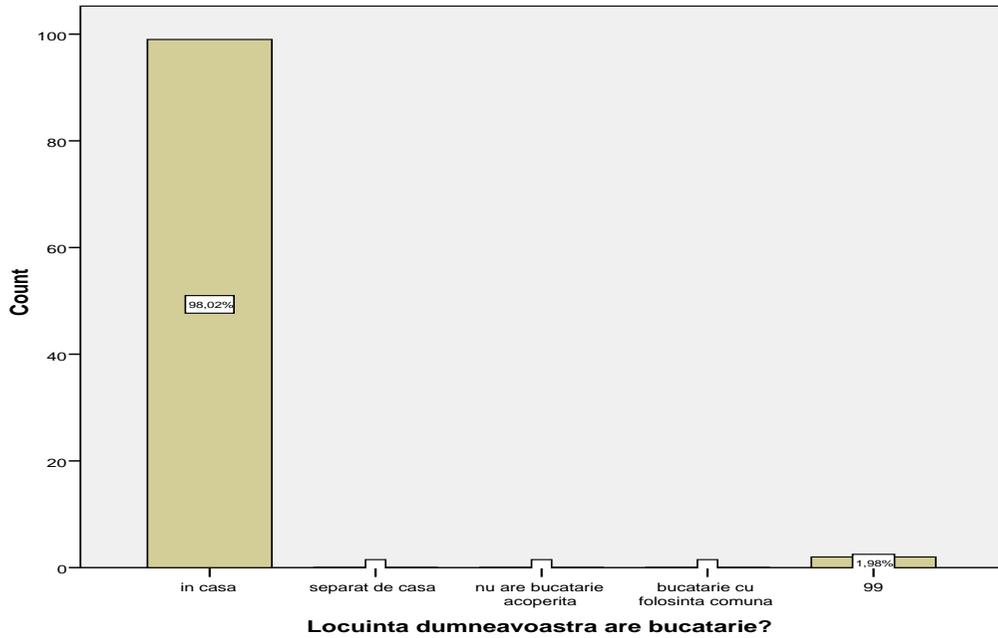
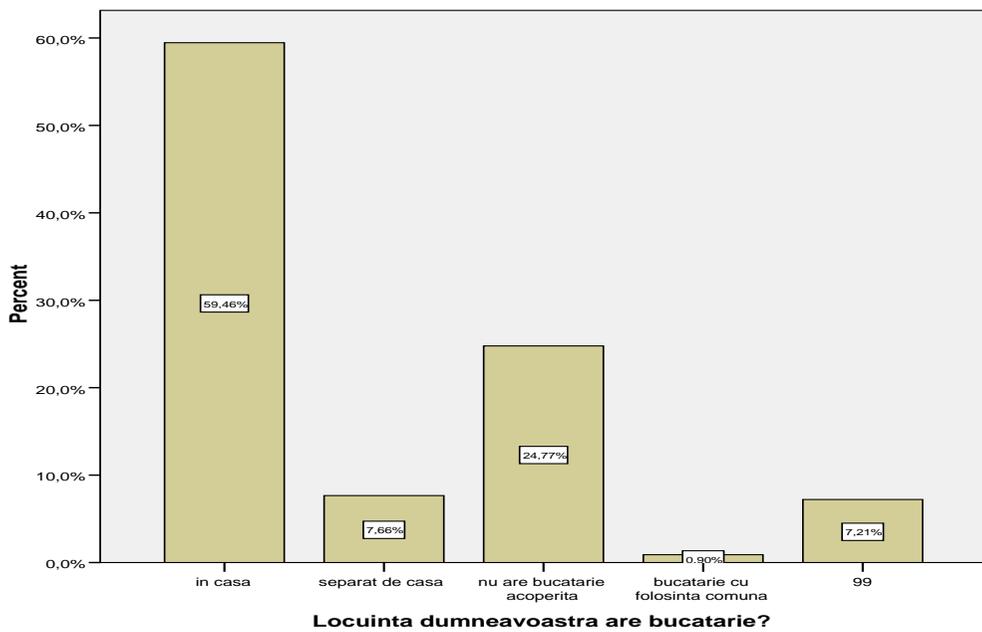


Table 20. Kitchen in the house (Romanian Roma)



Comparing the situation in the two countries, some important differences occur again. Thus, if 98.02% of Roma households in Hungary have a kitchen in the house, this is happening

only in 59.46% of Roma in Romania. Instead we have here a percentage of 7.66% of cases in which the kitchen is separated from the house, 24.77% have a not covered kitchen and even a small percentage (0.90%) use common kitchen with other families in town.

Table 21. Is there current water in the household you actually live? (Roma in Hungary)

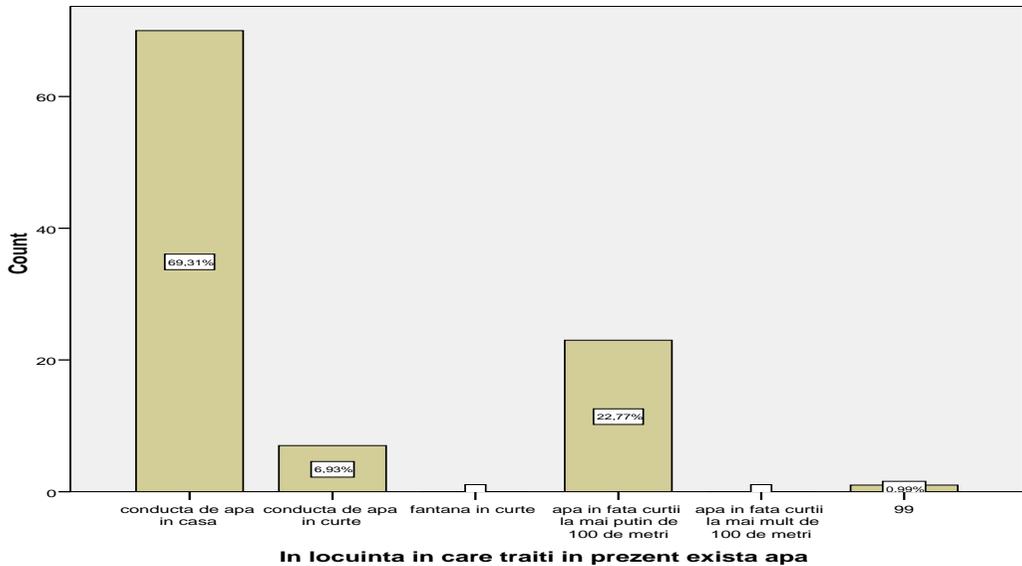
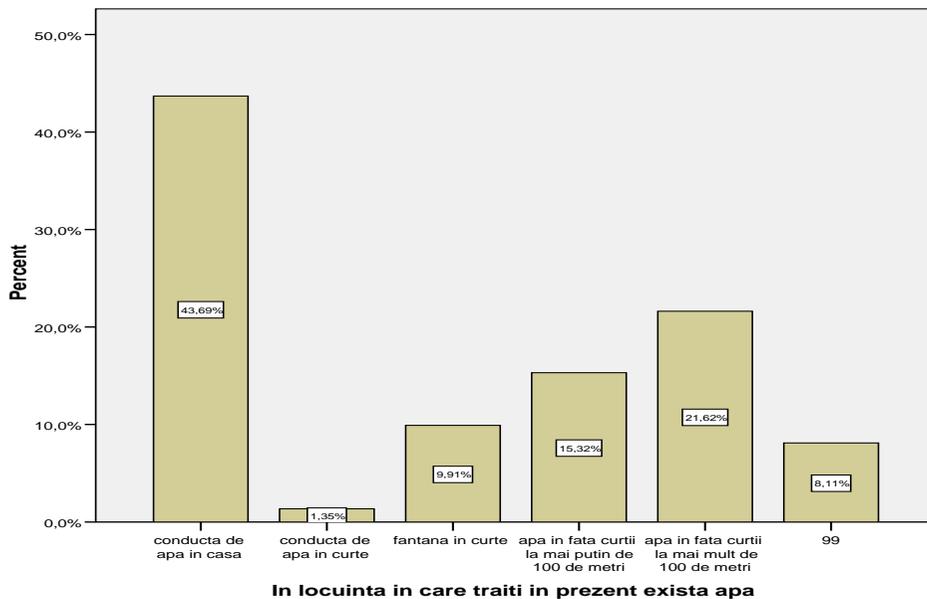


Table 22. Is there current water in the household you actually live? (Roma in Romania)



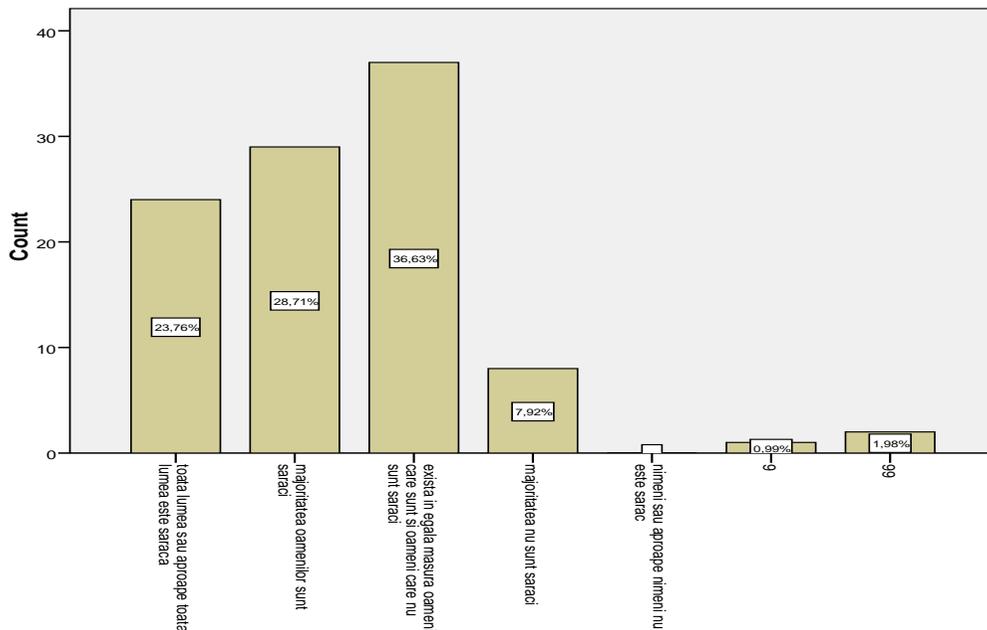
In terms of water use in the home, there are also significant differences between the two cases. Thus, in Hungary 69.31% compared to 43.69% in Romania are endowed with water

pipe in the house. 9.91% have a fountain/well in the courtyard in Romania compared to zero percent in Hungary. 15.32% of the Roma households in the Romanian sample are using the water source in the front of the courtyard at less than 100 meters compared to 22.7% in the Hungarian sample. 21.62% of the Roma households in the Romanian sample have water in the front of the courtyard at more than 100 meters compared to 0% in the Hungarian sample. Again, big differences appear between the two cases.

1.5.5. The poverty of the neighborhood

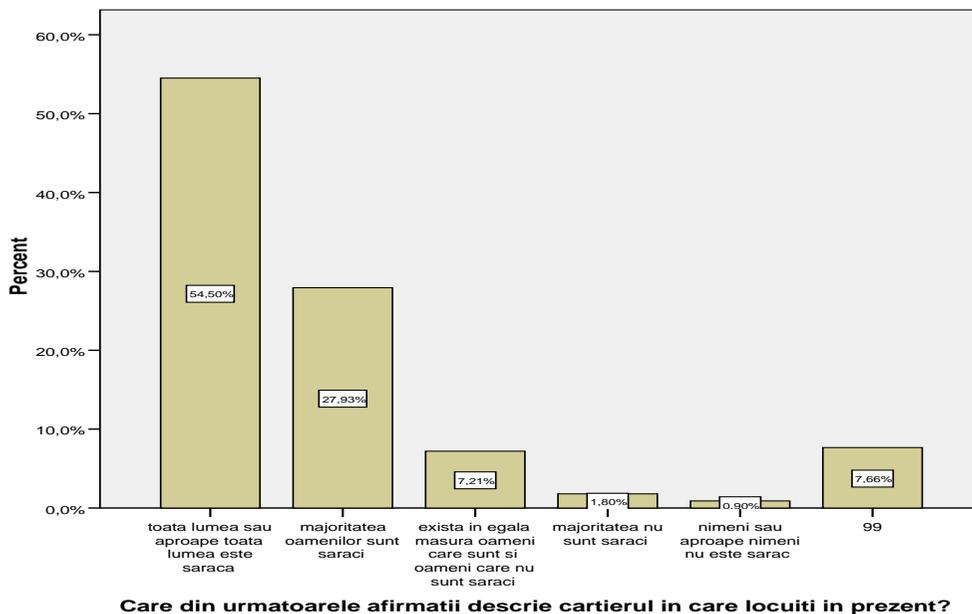
The Roma of the samples selected from the two countries live, in most cases, in poor neighborhoods compared with the majority. In our survey we inquire about the perception of the Roma on the neighborhoods in which their dwellings are.

Table 23. The perception of the poverty of the neighborhood (Hungarian Roma)



Care din urmatoarele afirmatii descrie cartierul in care locuiti in prezent?

Table 24. The perception of the poverty of the neighborhood (Romanian Roma)



It can be clearly seen that the perceived level of poverty is much higher in the Roma neighborhoods in Romania compared to that in Hungary. If we take the first two items (*Everybody or almost everybody is poor* and *Most of the people are poor*), their percentage is definitely higher for Romania, 82.4%, compared to 52.4% for Hungary. As far as item 4 is concerned (*Most of them are not poor*), we notice that the relevant percentage is lower in Romania (1.80%), than in Hungary (7.92%).

To have a better idea about the neighborhood of the Roma households, let's see who the neighbors of the subjects of our sample are (Roma or non-Roma neighbors).

Table 25. Who are the neighbors of the Roma? (Hungarian Roma)

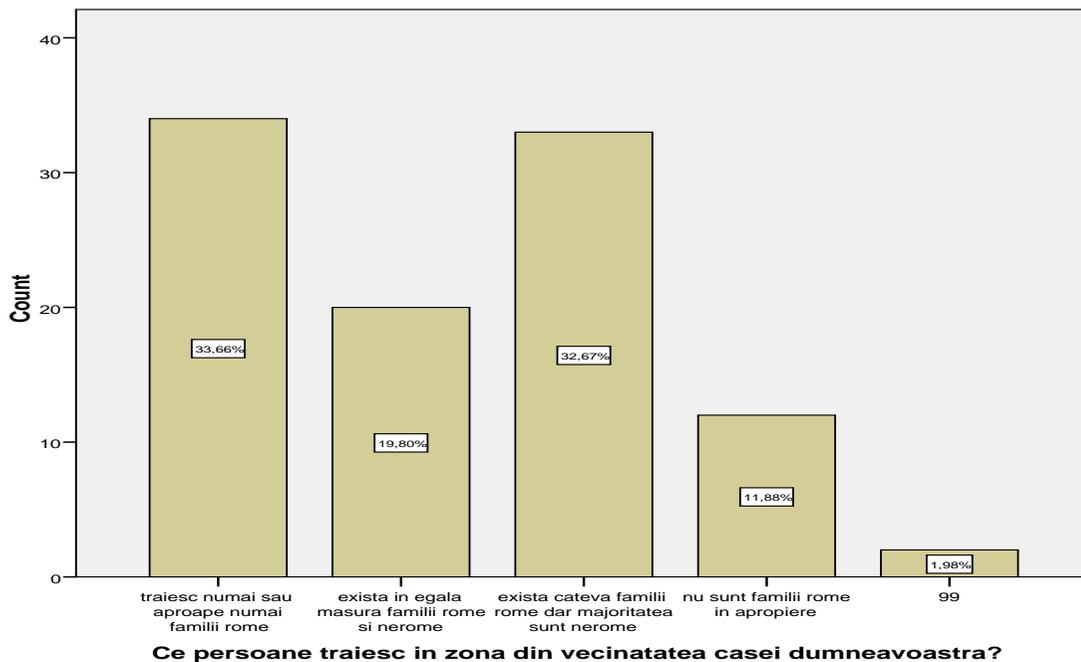
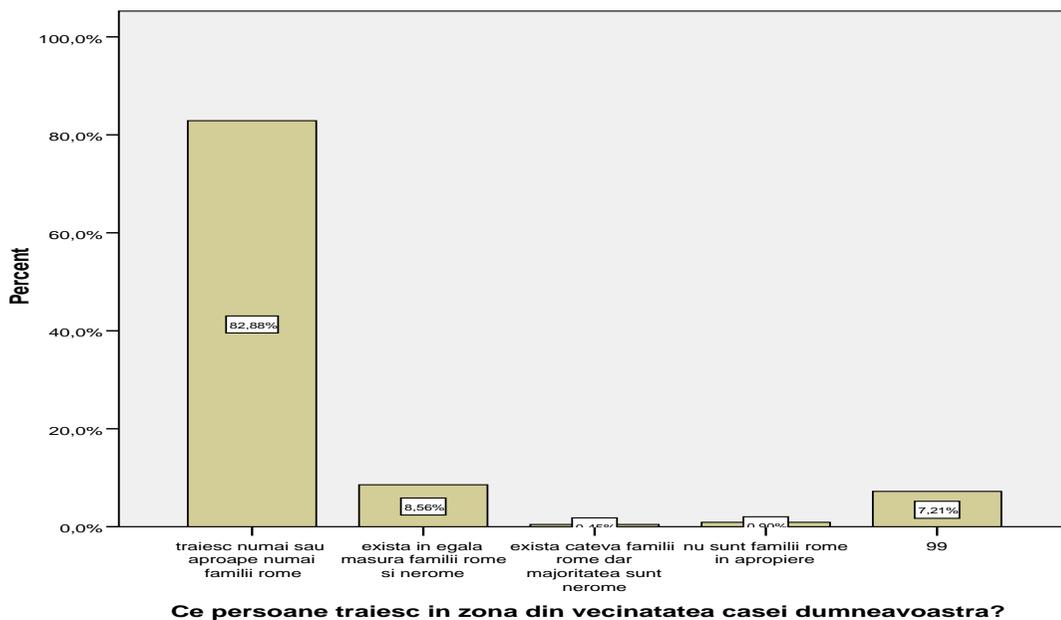


Table 26. Who are the neighbors of the Roma? (Romanian Roma)



Although the localities were selected by Romanian and Hungarian experts on the criterion of poverty and occurrence of social problems of the Roma communities, we can notice

differences in the ethnic composition of the neighborhoods. In Romania, the Roma tend to live in compact areas with Roma majority population (82.88%), while in Hungary the percentage is only 33.66%. However if we take items 3 and 4, the situation is clearly different for the two countries (44.55% in Hungary and 1.35% in Romania).

Table 27. Satisfaction with the neighborhood (Roma from Hungary)

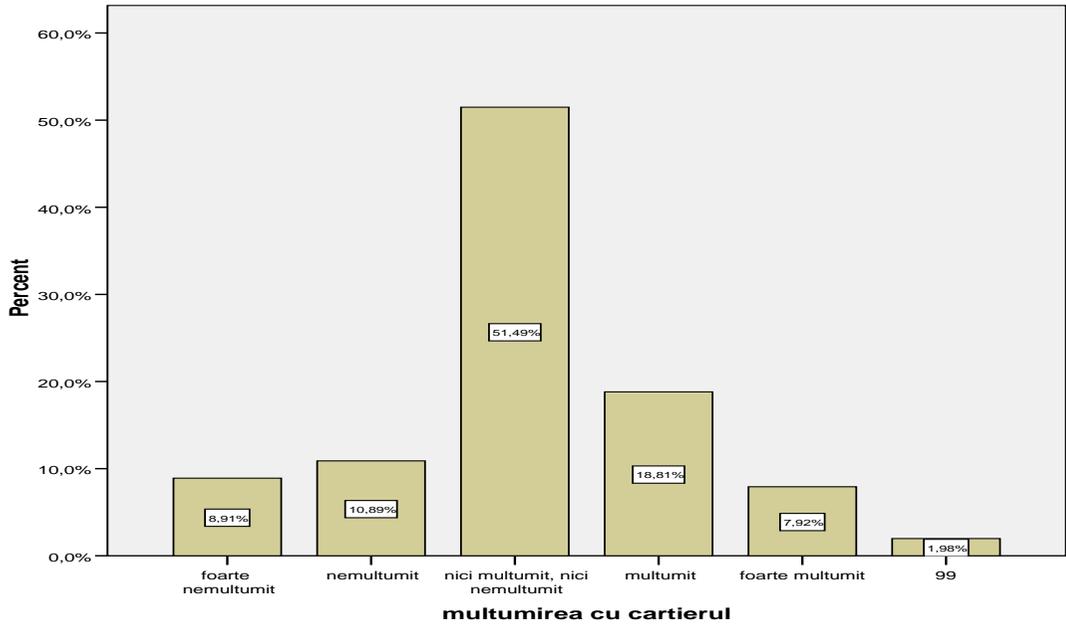
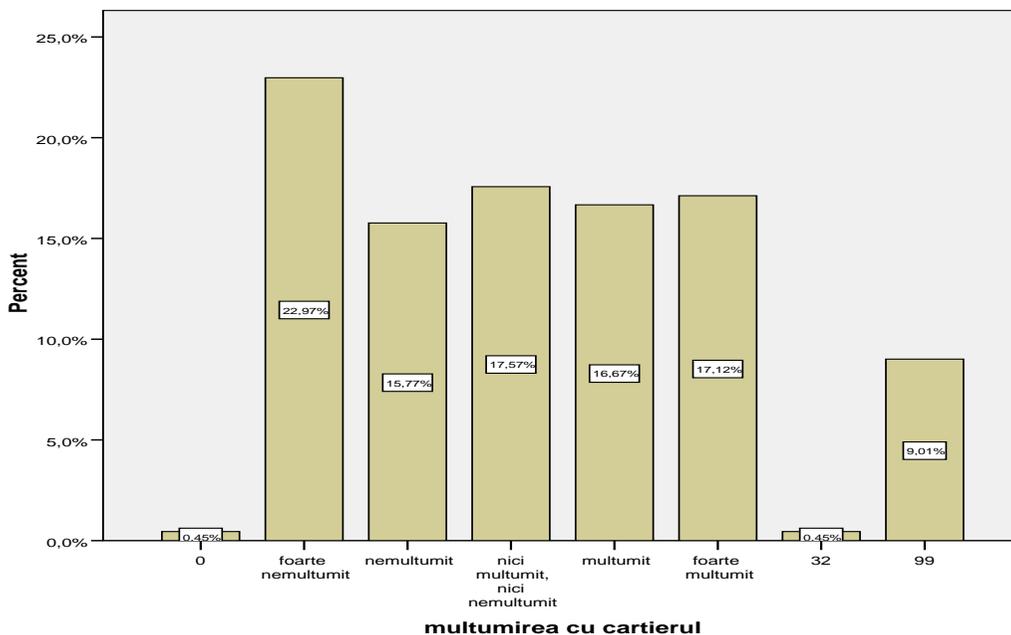


Table 28. Satisfaction with the neighborhood (Roma from Romania)



Concerning the satisfaction with the neighborhood, we notice again that the percentage of those very dissatisfied and dissatisfied is much higher (almost twice as high) in Romania than in Hungary (about 38.77% compared to almost 20%). It is interesting to notice that the percentage of those satisfied and very satisfied is greater in Romania (around 33.79% compared to almost 27%).

1.5. Conclusions

Analyzing the data on the Roma communities living in Romania and Hungary, we can find some significant differences. Even if Roma in Romania are more satisfied with their life, perhaps as the consequence of their more traditional life outlook, but also due to the ethnic composition of their neighbourhood, the Roma living in Hungary seem to be more satisfied with their dwellings. In terms of most objective indicators (ownership status, building materials, the number of rooms, the number of persons in the household, the hygiene, the possession of bathroom, toilet, kitchen, heating), Roma in Hungary are living in comparatively better conditions.

In contrast with their co-ethnics from Romania, Hungarian Roma live in neighborhoods that include both Roma and non-Roma, an aspect that has a great importance in their integration into society. Although according to Michael Stewart they resisted assimilation during socialism, our data demonstrate that today they seem to be much closer to the civilizational level of the larger society than ever before. It is worth to mention that they define themselves mostly as Hungarian Roma („magyar cigany”), unlike Roma from Romania, who mainly identify with their traditional community belonging (neamuri). The higher level of integration of Roma in Hungary is also proved by the attachment of most of them to the

mainstream churches, while in case of Romania the influence of Neo-Protestant religious communities is much higher among the Roma population.

One indicator of integration is the one related to housing quality. From this point of view too, Roma in Hungary are socially more integrated than the Roma in Romania. Their dwellings indicate a serious lag compared both to the Roma in Hungary, but also to the majority group. Roma in Romania seem to be much more traditional if we analyze all these indicators of housing quality.

In terms of differences between localities, they are more pronounced in Romania, where, according to our data, the community of Osorhei seems to be the poorest, having worse conditions not only compared to Oradea, but also to Ineu de Cris. Relatively small differences can be noticed in Hungary, between the communities of Biharkeresztes and Told, may be due to geographical proximity and to the fact that Told is a rural community while Biharkeresztes became a town only recently, still having mostly semi-rural community features.

Housing is an important indicator of the quality of life, influencing the health status, the participation in education and perhaps to some extent also the level of integration into the formal economy. For the development of the quality of housing, a more active involvement of the Government and of the local authorities, as well as the involvement of NGOs and Roma leaders is needed, even if the home's quality primarily depends on the income level of each family, and that is a problem in each case.

It is true that the same issue depends also on the neighborhood. If Roma see that the neighbors are poor and do not make efforts to improve their living conditions, they are tempted to do the same. If instead their neighbours belong to another ethnic group and Roma see that they have higher living conditions, this may also be an incentive for Roma. This fact is influencing to a large extent the difference between housing conditions of Roma in Hungary compared with those from Romania. Roma in Romania live in compact areas with a high density of social problems and a serious shortage of modernity. Perhaps a solution would be that Roma in Romania live in ethnically mixed neighborhoods or areas. Roma in Romania are isolated, marginalized, segregated compared to other ethnic groups both in terms of housing, participation in education or integration into the formal economy. On the other hand, there is also a dissociating mechanism probably related to their traditional values.

Probably long-term solutions would be large-scale investments in educational and also social economy programs, which could promote a better integration into the formal economy and to the successful securing of sustainable sources of income leading to better housing and civilizational conditions as well.

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ANNEXES

Annex 1. Simple regression analysis between satisfaction with housing and satisfaction with life (for Hungary)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,696(a)	,485	,479	6,891

a Predictors: (Constant), Satisfaction with housing

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4419,361	1	4419,361	93,063	,000(a)
	Residual	4701,312	99	47,488		
	Total	9120,673	100			

a Predictors: (Constant), Satisfaction with housing

b Dependent Variable: how satisfied are you with your present life

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	1,518	,743		2,042	,044
	Satisfaction with housing	,497	,051	,696	9,647	,000

a Dependent Variable: how satisfied are you with your present life

Annex 2. Simple regression analysis between satisfaction with housing and satisfaction with life (for Romania)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,795(a)	,632	,630	15,515

a Predictors: (Constant), Satisfaction with housing

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	90903,165	1	90903,165	377,662	,000(a)
	Residual	52954,006	220	240,700		
	Total	143857,17	221			

a Predictors: (Constant), Satisfaction with housing

b Dependent Variable: how satisfied are you with your present life

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	2,118	1,131		1,872	,062
	Satisfaction with housing	,735	,038	,795	19,434	,000

a Dependent Variable: how satisfied are you with your present life

Annex 3. Simple regression model between income and satisfaction with life (for Hungary)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,990(a)	,981	,980	1,336

a Predictors: (Constant), Thinking about the total family income, can you say that it is enough or not?

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8944,003	1	8944,003	5011,926	,000(a)
	Residual	176,670	99	1,785		
	Total	9120,673	100			

a Predictors: (Constant), Thinking about the total family income, can you say that it is enough or not?

b Dependent Variable: how satisfied are you with your present life

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	1,549	,138		11,190	,000
	Thinking about the total family income, can you say that it is enough or not?	,974	,014	,990	70,795	,000

a Dependent Variable: how satisfied are you with your present life

Annex 4. Simple regression model between income and satisfaction with life (for Romania)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,829(a)	,688	,686	14,292

a Predictors: (Constant), Thinking about the total family income, can you say that it is enough or not?

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	98920,358	1	98920,358	484,291	,000(a)
	Residual	44936,813	220	204,258		
	Total	143857,171	221			

a Predictors: (Constant), Thinking about the total family income, can you say that it is enough or not?

b Dependent Variable: how satisfied are you with your present life

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	2,682	1,026		2,614	,010
	Thinking about the total family income, can you say that it is enough or not?	,740	,034	,829	22,007	,000

a Dependent Variable: how satisfied are you with your present life

Annex 5. Simple regression between income and satisfaction with housing (for Hungary)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,701(a)	,491	,486	9,596

a Predictors: (Constant), Thinking about the total family income, can you say that it is enough or not?

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8791,698	1	8791,698	95,468	,000(a)
	Residual	9116,996	99	92,091		
	Total	17908,693	100			

a Predictors: (Constant), Thinking about the total family income, can you say that it is enough or not?
b Dependent Variable: satisfaction with housing

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	2,860	,994		2,876	,005
	Thinking about the total family income, can you say that it is enough or not?	,965	,099	,701	9,771	,000

a Dependent Variable: satisfaction with housing

Annex 6. Simple regression between income and satisfaction with housing (for Romania)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,813(a)	,662	,660	16,079

a Predictors: (Constant), Thinking about the total family income, can you say that it is enough or not?

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	111217,744	1	111217,744	430,183	,000(a)
	Residual	56877,918	220	258,536		
	Total	168095,662	221			

a Predictors: (Constant), Thinking about the total family income, can you say that it is enough or not?
 b Dependent Variable: satisfaction with housing

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	3,167	1,154		2,744	,007
	Thinking about the total family income, can you say that it is enough or not?	,785	,038	,813	20,741	,000

a Dependent Variable: satisfaction with housing

Annex 7. The regression model for the relationship between housing size and income (Roma in Hungary)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,698(a)	,488	,483	9,474

a Predictors: (Constant), Thinking about the total family income, can you say that it is enough or not?

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8464,729	1	8464,729	94,299	,000(a)
	Residual	8886,717	99	89,765		
	Total	17351,446	100			

a Predictors: (Constant), Thinking about the total family income, can you say that it is enough or not?

b Dependent Variable: which is the approximate area of the dwelling?

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	4,703	,982		4,790	,000
	Thinking about the total family income, can you say that it is enough or not?	,947	,098	,698	9,711	,000

a Dependent Variable: which is the approximate area of the dwelling?

These tables show a significant association and also a strong relationship.

Annex 8. The regression model for the relationship between the number of the persons in the dwelling and income (Roma in Hungary)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,991(a)	,981	,981	1,322

a Predictors: (Constant), Thinking about the total family income, can you say that it is enough or not?

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9058,863	1	9058,863	5184,618	,000(a)
	Residual	172,978	99	1,747		
	Total	9231,842	100			

a Predictors: (Constant), Thinking about the total family income, can you say that it is enough or not?

b Dependent Variable: How many persons live in your house?

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	1,205	,137		8,796	,000
	Thinking about the total family income, can you say that it is enough or not?	,980	,014	,991	72,004	,000

a Dependent Variable: How many persons live in your house?

Annex 9. The regression model for the relationship between housing size and income (Roma in Romania)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,800(a)	,641	,639	15,124

a Predictors: (Constant), Thinking about the total family income, can you say that it is enough or not?

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	89746,698	1	89746,698	392,372	,000(a)
	Residual	50320,261	220	228,728		
	Total	140066,959	221			

a Predictors: (Constant), Thinking about the total family income, can you say that it is enough or not?
b Dependent Variable: which is the approximate area of the dwelling?

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	1,355	1,086		1,248	,213
	Thinking about the total family income, can you say that it is enough or not?	,705	,036	,800	19,808	,000

a Dependent Variable: which is the approximate area of the dwelling?

Annex 10. The regression model for the relationship between the number of the persons in the dwelling and income (Roma in Romania)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,862(a)	,743	,742	12,589

a Predictors: (Constant), Thinking about the total family income, can you say that it is enough or not?

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	100782,651	1	100782,651	635,916	,000(a)
	Residual	34866,520	220	158,484		
	Total	135649,171	221			

a Predictors: (Constant), Thinking about the total family income, can you say that it is enough or not?
b Dependent Variable: How many persons live in your house?

Coefficients(a)

Model		Unstandardized Coefficients	Standardized Coefficients	t	Sig.

		B	Std. Error	Beta	B	Std. Error
1	(Constant)	2,274	,904		2,516	,013
	Thinking about the total family income, can you say that it is enough or not?	,747	,030	,862	25,217	,000

a Dependent Variable: How many persons live in your house?

THE JOURNEY TO COMPETITIVENESS: EU SPEEDING UP ON THE ROAD PAVED WITH KNOWLEDGE AND INNOVATION

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In the attempt to boost its international competitiveness, the European Union realized that it should enrich the ways to achieve it by using the intangible assets that it holds. Knowledge and intellectual capital, innovation, science and entrepreneurship are key drivers of economic development and renewal. The traditional resources on which economies rely on are scarce, while these ones are abundant and steady. Moreover, this type of assets can easily increase their value through sharing and they trigger multiplicative effects in the economy. The paper tackles these issues and makes an assessment of the degree of innovation in the EU. The study aims to provide an answer to the question of whether EU's overall performance proves that it is truly driven by knowledge and innovation or not. Using a qualitative method of research, this paper identifies innovation patterns of the member states from a geographical perspective. In order to provide a compelling analysis, the data ranges from indicators capturing science and technology activities, firm innovation to the internationalization of research activities and the tertiary-level graduates. The results show substantial discrepancies between the European countries and reveal that knowledge flows scaled by the level of innovation are a localized phenomenon, therefore some countries are more innovation-oriented and they reap the benefits better.

Keywords: *knowledge-based economy, competitiveness, innovation, R&D, technology.*

JEL code: *O31, O33, M21, I25*

I. Introduction

The European Union is continuously trying to enhance its international competitiveness and to find new sources of growth by using intangible assets such as innovation, science and entrepreneurship. The development of the knowledge-based economy highlights the need to generate knowledge, to exploit, to transfer and to apply it. Since nowadays information is widely accessible, the knowledge and skills are assets that can provide a real edge. Knowledge and innovation are hot topics because they are key drivers of economic development and along with other components they can turn into a strong competitive advantage of any nation. So far, regions were identified as important players in the knowledge-based economy. Because they fail to enhance their potential on their own, the triple helix model involving the public sector, the business community and the higher education institutions was developed. Its purpose is to create links and interactions between those three and in this manner to create a synergy. UE regions and countries differ from each other in terms of intangible assets and factors of competitiveness.

Knowledge is a special type of resource for an economy and it's a non-rival input in generation of new knowledge. This particular subject is important because unlike most resources that become depleted when used, knowledge can be shared and grow through

application which further leads to innovation. Knowledge is not based on the scarcity principle but rather on abundance, hence knowledge and technology became the heart of the global economy. This points out that intangible assets are increasingly turning into competitiveness determinants. Moreover, evidence from a number of countries suggests a faster growth of investment in intangible assets than in tangibles hence the interest for them. The Knowledge Economy Index developed by the World Bank shows that in 2009, the top five countries are European. Denmark is ranked first, followed by Sweden, Finland and the Netherlands, this fact suggesting that the Nordic countries of EU are economies driven and based on knowledge. Among the economies least based on knowledge are Greece, Bulgaria and Romania. EU's competitors in the global arena are Canada (ranked 6th), the United States (ranked 9th) and Australia (ranked 11th).

Through the multi-level policy governance, the European institutions support the investment in research, infrastructure and transfer of knowledge and technology. The most important pillars are the 7th Framework Programme for Research and Technological Development, the Competitiveness and Innovation Programme and the Structural Funds as tools. Innovation is a growth driver for businesses, industries and countries as it reinforces their competitive position on the markets, boots their productivity and develops key competences. At the European level there are large discrepancies concerning the innovation rates. While different forms of innovation activities do occur in most of the EU regions, those based on R&D are spatially concentrated. Industrial structure, capabilities and other territorial characteristics affect the capacity of various economic actors to generate and absorb knowledge, as well as fostering the innovation processes. EU spends annually an average of 1,81% of the total GDP on research and development activities. Regional knowledge networks and joint research initiatives of the business community and the European universities are becoming increasingly prevalent. The creation of science parks is one of the strategies used by the European universities in order to enhance the knowledge spillovers. Science parks enable rapid technology transfer, offer improved funding for academic programs, sponsored research agreements and they create opportunities to trade the intellectual property. Research partnerships between companies and universities often lead to a high impact on the knowledge flows and innovation.

The paper aims to investigate the degree of innovation throughout the member states of EU as well as to launch hypotheses regarding the causes of the discrepancies between countries. The study attempts to answer the following question: "To what extent is the European Union driven by knowledge and innovation?". The main goal of the research is to identify the innovation patterns of countries from a geographical perspective and to assess the overall status of the EU as a knowledge-based economy.

I. Literature review

The literature referring to the intellectual capital or knowledge, human capital and innovation is not as broad as other topics in economics because it is relatively new and many areas are still to be explored. The theories of knowledge creation have social foundations as Fleck (1935) defined "thought communities", Schon (1983) investigated the "communities of reflective practitioners", Egestrom (1987) "activity systems". Others researched the "communities of practice" or "networks of practice" (Brown and Duguid, 2000). A substantial addition to the literature was brought by Nonaka (1995, 2008) though the concepts of "socialization and Ba". The innovation theories are rooted in a

microeconomic approach as they started to arise based on the firm level and later they extended to markets, which further led to a regional approach. A large part of them related to the organizational theories, investigated the conditions in which innovation arises, the intensity of it, the impact of external knowledge while others attempted to create models of innovation (Von Hippel, 1977; Chesbrough, 2003; Nonaka, Toyama and Hirata, 2008). Gary Backer was the pioneer of the human capital theory. The emphasis on human capabilities has been followed and expanded in modern research on innovation. Studies regarding innovation reveal that the development of new technologies and innovation itself occurs through the activities of skilled personnel such as researchers, engineers and managers. Innovation is a social process, involving not only new techniques but also new forms of knowledge and competences. Competence is embodied in the collective experience and activities of the people who implement new technologies (OECD, 2010: 8). Competitiveness depends, to a large extent, on the ability to generate a good momentum of employment, which is the result of issues related to demographics, limitations of the labor market, qualifications of human resources and achievement of high levels of productivity (Couto, Vieira and Tiago & Natario, 2006). Econometric studies confirm the positive relationship between labor productivity and innovation (Vieira and Vazquez, 2008: 60). In the knowledge-based type of economy, wealth is increasingly created through effective management of knowledge workers instead of using the efficient control of physical and financial assets. The growing importance of knowledge and innovation leads to more investments in the companies' intangibles such as experience, talents, skills, capabilities and intellectual capital (Stewart, 1999: 67).

European cross-country studies using equilibrium models were conducted to define the dynamics of innovation and productivity growth. One particular paper finds that technology diffusion between countries falls as the distance between them grows (Eaton and Kortum, 1996: 251-278). The same authors conclude that human capital raises the ability of a country to absorb technology. The technology diffusion is significant and proportional to the countries' ability to absorb innovation, thus spillover effects arise in different regions (Bottazzi and Peri, 1999: 8). The fact that innovation production is more sensitive to demand pull pressures and less sensitive to supply pressure is underlined by other studies (Gerowski and Van Reenen, 1996). Parts of the literature also tackle the personnel mobility issue and the national innovation systems. The movement of labor force and the tacit knowledge they carry with them is a key flow in any national innovation system. The movement of workers through sectors and firms is a way of spreading innovation. Knowledge transfer, human capital enrichment in the form of the production of graduates along with the development of the regional labor force by training activities outlines the potential to promote economic development (Riddel and Schwer, 2003: 80). Despite restrictions and limitations, universities serve as sources of knowledge for businesses. Policies designed to build new niches of knowledge and develop more effective mechanisms for transferring university-based knowledge to regional partners can bolster technology communities and shape innovation cultures (Benneworth and Charles, 2005). Another important idea provided by the literature is that just as agglomerations of traditional resources appear, knowledge spillovers can generate an agglomeration of innovative activity.

III. Methodology

The paper uses an exploratory data analysis in order to examine the spread of knowledge and innovation within the EU, through the research and development activities. The qualitative method of direct observation was considered appropriate in this particular case because it allows making suitable connections between the indicators and it is proper for comparisons. Following it, meaningful conclusions will arise and the main goal of the study can be achieved. A pool of six countries was chosen as a base for the comparison along with the European level comprising the 27 member states. The selection was carried out by geographical criteria and each of the countries aims to represent a group (the core of EU or the West countries, the Central countries, the Nordic countries and the countries located to the periphery). The data collection entailed identifying appropriate indicators that can describe the extensiveness of the R&D activities and their effects (the level of firm innovation, the type of innovation). The “Science, Technology and Industry Scoreboard 2009” by OECD was the primary source for data collection and the information refers up to the year 2008. The first group comprising of four indicators captures a synoptic view over the expenditures in R&D, the main sources and the performers of these activities (Table 1). The second group including three indicators aim to emphasize how does EU and its countries compete in the world economy as far as innovation is concerned, and the next two provide an insight of how Europe connects to the global research. Finally, the last indicator shows to what extent the European Union invests in the knowledge economy through education.

Table 1 *The status of research and innovation in the EU*

Indicator	EU27	Finland	Germany	Sweden	Czech Republic	Luxemburg	Portugal
GERD (Million current PPP, \$)	299 635	7 555	83 974,8	12 521	4 094,8	708,5	4 410
R&D financed by :							
- Industry	54,3	68,1	67,3	58,9	45,8	76,0	48,1
- Government (%)	34,2	24	28,4	27,3	43,9	18,2	43,7
R&D performers:							
- Higher education	24	19,7	17,3	24,9	18,1	9	35,4
- Industry	61,2	71	68,2	70,5	60	73,3	46,7
- Government (%)	13,6%	9,3	14,5	4,4	21,4	17,3	7,4
Researchers	1 531 000	40 849	311 500	46 719	28 759	2 041	45 909
Share of large firms with new-to-	32	49	41	42	35	34	39

Indicator	EU27	Finland	Germany	Sweden	Czech Republic	Luxemburg	Portugal
market product innovation (%)							
In-house product innovators (%)	39	43	59	47	40	70	43
Non-technological innovation (%)	69	75	90	86	70	90	80
The ownership of inventions made abroad but within the EU (%)	11	16	7	20	10	50	3
Firms with foreign collaboration on innovation as a percentage of all firms, within EU	7,9	17	12	10,5	8,2	14	4
Tertiary-level graduates in total employment * (%)	28	41	28	34	16	32	16

* Tertiary-level graduates are defined as holders of degrees at the ISCED levels 5B, 5A and 6.

Source: compiled by the author based on OECD statistics (“Science, Technology and Industry Scoreboard 2009”)

In the coming part I will point out the reasons for choosing these indicators and their relevancy for the analysis. The Gross Domestic Expenditure on Research and Development (GERD) is an indicator of the science and technology (S&T) activities and it is used as a summary of R&D activities. The purpose of including is to assess the amplitude of these expenses in each of the countries included in the study and to underline the large differences in the absolute value. If linked to growth and national income indicators it can contribute to measuring the sustainable development of a country. Further, identifying the finance sources for the R&D activities can uncover the proportion in which a country relies on the private business sector and on the government in this matter. Depending on which sector prevails, conclusions can be drawn regarding the interest and the financial power of each in supporting such activities. As the next step, it is important to also identify which are the

performers of the R&D activities and evaluate to what extent the sponsors are also performing them. However, because expenditure does not reflect the potential of R&D in a given country but only the effort conducted in a certain period of time it is appropriate to add other relevant indicators to the analysis.

To have a deeper understanding it is necessary to take a microeconomic approach of this issue and assess the innovation and firm performance. Innovations have different degrees of novelty and the impact of those is significant on the performance and on the competitiveness. Nevertheless, it is a clear distinction between being an adopter and being an innovator. The share of large firms with a new-to-market product innovation indicator aims to show the scale or the spread of the innovation phenomenon. Large companies were preferred as a measurement unit because usually small and medium enterprises are less likely to introduce novel innovations and they are rather known as adopters. In order to appraise the diffusion of new technologies in EU, the indicator related to in-house product innovators captures whether an innovation was developed within or outside the firm. This shows to what extent the firm interacted with other parties during the process. Innovation has both technological and non-technological aspects. The non-technological innovation arises especially in the case of services and it deals with the development of new marketing methods. EU's economies are mostly tertiary hence it is appropriate to analyze the cases in which innovation is not dependent on technology.

Cross-border inventions occur when the country of residence of the owner and the inventor are different and in most cases it is a result of the activities of multinational corporations (the applicant is a corporation and the inventors are located in a foreign subsidiary). The internationalization of research activities is a driver of innovative firms and country competitiveness. This is often measured through the share of patents filled by one country for an invention made in another country. This ratio shows the extent to which domestic firms control inventions made by residents of other countries. Employment of tertiary-level graduates is an indicator of the innovative potential of an economy and of the capacity of its labor market to allocate human capital to the production processes. Additional data concerning the investments in knowledge economy measured by the new university graduates unwraps pinpoints that EU has a 35% university graduation with almost 2,2 millions of degrees annually. This indicator reflects a country's capacity to absorb, develop and diffuse knowledge and to supply the labor market with highly skilled workers. The scientific studies are more popular in the Nordic Countries where science and engineering degrees account for more than 37% and 29% of total awards [1]. However, most university degree recipients graduate in the social sciences, which in Poland and Hungary exceed 40% of total graduates.

IV. Results

The research and development activities in most of the EU member states are financed by the private sector, through the industry but in the Central and periphery countries a large share is still supported by the national governments. The main performers of these activities are those who fund them, therefore the business sector. However, higher education institutions (universities, institutes or research organizations) conduct a significant part of the European R&D activities (24%). Countries like Portugal or Sweden have a significant level of researching within the academic environment, while Luxemburg does not rely on this category of performers. In the Nordic countries, the governments develop research

activities in an extremely limited share as they prefer to contract these services either from institutes, either from business performers. The European Union has more than a million and a half of researchers of which almost one fifth comprises of German researchers. Finland and Sweden have a reduced population but a large ratio of researchers while countries in the Central Europe have higher population and a lot lower shares of researchers than the Nordic ones. The statistics show that product innovation within the large companies in EU is not very widely spreaded, only 32% of the firms were able to bring completely new-to-market product innovations. This means that the majority of companies, both MNCs and SMEs are adaptors and not innovators. However, there are substantial discrepancies between countries but the West and Nordic ones seem to develop new products or improve the existing ones at a larger scale than the rest of the member states. On average, just 39% of the European companies prefer to engage in the innovation process within their own organization, which means the environment for technology diffusion is proper as they strongly interact with other entities. Luxemburg is an exception from this case. Due to the fact that almost all EU's countries have tertiary economies, the non-technological innovation has very high levels which indicates to some extent a certain level of creativity of the marketers. The data emphasizes that a weakness of the European Union is the reduced internationalization of the research activities. This fact is proven both by the low share of ownership of inventions made within the EU states and the reduced percentage of firms involved in collaboration on innovation. That is rather a surprising finding considering that EU is the host of many transnational corporations, which usually trigger the research internationalization phenomenon. However, significant differences among the countries can be observed in this case too. The Nordic countries or small economies of EU (Luxemburg) tend to collaborate more frequently with foreign partners. Cross-country differences in international collaboration could be explained by the propensity of the firms. Some have similar innovation rates but a different international collaboration rate, which suggests that some are more open or inclined to participate in joint activities. The innovation partnership outside EU is much less frequent and it is usually below 5% in most EU countries. At last, the labor markets within the European Union don't seem to benefit of a strong supply of highly skilled graduates. The low share of tertiary-level graduates indicates that valuable human capital is not allocated properly to the production process, which means that the innovative potential is not harnessed.

V. Conclusions

The European Union raised the awareness of the prominence of knowledge, technology, innovation and science in the race for the world competitiveness. The study confirms that knowledge flows measured by the level of innovation are a localized phenomenon. The West and the Nordic European countries are those with intense research and innovation activities. Furthermore, some countries have a high-income per capita, which could lead to the conclusion that innovations arise only in certain conditions. The presence of research hubs belonging to the multinational corporations, the public research labs and leading research universities, all located in these countries, could be an explanation for this phenomenon. However, the rest of the regions are catching up by developing their research capacity. One major problem is that due to the economic turmoil, the R&D budgets of the European companies were severely diminished. Once the economies will overcome the disarray completely, the situation will certainly improve.

One common characteristic of the European countries is that R&D activities are funded by the business sector which is also the main performer. Private enterprises are those that compete on the national, European and international markets, consequently a higher competitiveness can be achieved by extensive innovation at this level. Large companies innovate more frequently than small and medium size companies, but the situation is not exceptionally great because only one third of them were able to compute new-to-market product innovations. However, the majority of the European firms rely on marketing innovations and not on process, procedure or product innovation. Organizational capabilities and the blend between creativity and productivity usually leads to incremental innovations, which are the most widely spread in business. EU has a proper environment for technology diffusion and innovation as companies are linked through innovation and knowledge flows [2]. Unfortunately, the research activities known as a key determinant of the enhancement of innovation has a low internationalization. Collaborating on innovation with foreign partners is an important source of knowledge inflows and the European companies should be aware of that. The linkages between firms are allowing them to access a broader pool of inputs (technology, human resources, funds, information) than what is available in their local environment as well as it lowers the costs and they share the risks. Since the companies prefer to innovate mostly with partners within the European Union, it suggests that geographical and cultural proximity are factors that have an influence on the innovation processes. A few EU countries are conducting a considering part of the research and development activities through education institutions. It is generally acknowledged that EU has low-mobility labor market and the low share of tertiary level graduates overcasts the innovative potential. It is extensively consented that research and development and a highly trained labor force are among the conditions for innovation and economic development of a country, region or group of countries.

This study contributes to the existing literature by focusing on basic aspects of the R&D activities in the EU countries, making connections between knowledge flows and innovation from a territorial perspective and revealing both strengths and weaknesses of the European innovation networks. Just like a racing car on the move, the European Union despite of having good aerodynamics it cannot reach the finish line (achieving the world competitiveness) if the road is not safe and paved with a durable material (knowledge and innovation).

VI. Notes

- 1.Science degrees include: life sciences, physical sciences, mathematics and statistics and computing, Engineering degrees comprise: engineering and engineering trades, manufacturing and processing; architecture and building.
- 2.and services) or process innovations (mainly production processes).

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AGRICULTURE IN ROMANIA IN THE PROCESS OF INTEGRATION INTO EUROPEAN STRUCTURES DURING POST – ACCESSION

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Summary:

European Union and its Member States shall adjust some provisions of the development strategies aimed at increasing food production in sustainable ways, protecting natural resources and increase competitiveness of European agriculture on the world market.

Romania faces imbalances in market conditions is not rationally use land particularly favorable to obtain a competitive agricultural supplies. Large annual variations in crop conditions in which the yields per hectare and per animal is about half the EU15 average does not provide the power necessary at affordable prices, especially for vulnerable population groups.

Addressing structural and operational problems of the institutional system of agriculture in Romania's European integration process is an important way of overcoming the situations to which the elimination of disparities in economic development and social peace disturbed by high and rising prices of food, produced in quantities increasing imports.

In the current international situation in which Romania difficulties in structural adjustment in agriculture and reduction of disparities compared to EU Member States, a national policy of granting real priorities for the sector is badly needed. These priorities cover both ways of achieving the overall objectives which fall within the strategic guidelines of the European Union and European integration meets the needs and solving specific national targets.

Keywords: European integration, rural development, agricultural policy, national objectives, agricultural holdings.

JEL Codes: Q0 , Q1

1. Strategic directions for agriculture and rural development in line with the EU strategy

European Union of 27 Member States has the strategic directions to integrate agriculture and rural environment for sustainable development to cope with economic risks and uncertainties, environmental, social and health. New challenges on the global market instability and food crisis have emerged under the impact of climate change, degradation of natural resources and soaring energy prices. The effects of income inequality have generated and rising food prices. As a result of these disturbances, and the predictable results of the negotiations of the WTO on agricultural trade liberalization, the European Union and its Member States shall adjust some provisions of the development strategies aimed at

increasing food production in sustainable ways, protect natural resources and increasing the competitiveness of European agriculture on the world market.

Community development in Romania are the conditions under which agriculture has not yet made the expected progress in adapting its structures based on competitive market demands, while the national economy is growing in 2000. To overcome this situation, which limits the expansion potential of the agricultural economy and measures are required to accelerate the modernization and organization of agriculture in sustainable use of renewable and non renewable resources for food security and economic equilibrium. Although Romania is not facing a food crisis, agricultural production is highly dependent on climatic conditions. Market imbalances have widened in the absence of coherent agricultural policy to ensure a certain continuity of funding during the transition period, due to the de structuring of products in the reform process and difficulties adapting to European agricultural model. Restoring private ownership of land has been separated from their organization and operation were not created to provide basic infrastructure services necessary for the production and marketing of agricultural products. Financing agricultural policy measures is still lacking, both in terms of ensuring the necessary funds and bureaucratic system of allocating them. Therefore, Romania is facing imbalances in the market conditions are not rationally use land particularly favorable to obtain a competitive agricultural supplies. Large annual variations in crop conditions in which the yields per hectare and per animal is about half the EU15 average does not provide the power necessary at affordable prices, especially for vulnerable population groups. The perpetuation of this situation and in years with high yields because of lack of storage and marketing structures, inflated and unjustified price of food imports.

In the new global conjuncture, the threat posed by climate change and escalating energy prices requires a new approach to the role of agriculture as a balancing factor for Romania's economic growth model.

2. Romanian agriculture integration in the EU requirements and national priorities

Romania needs to build a national agricultural policy into line with requirements and rules for the CAP to the market orientation of agriculture, modernization of rural communities and enhancing environmental protection measures. At present concerns for the Common Agricultural Policy implementation mechanisms, the priority now, do not put enough emphasis on the fact that they must be combined with specific measures of association and cooperation of small farmers to increase production to the market, excessive land parceled out to the practice of merging technologies, training food chains, national agricultural research reconsideration.

Without visible results in the evolution of these structures is difficult for the Romanian agriculture to become short and medium term consistent with the Western European. As a member of the European Union, Romania has a significant community support for the market and especially for rural development, plus national and support. Adapting agriculture to EU requirements creates benefits for countries that are in an efficient organizational system such as that of the European Community. To qualify for these benefits are necessary major adjustments in operating structures for the formation and expansion of the commercial sector to include family farms with opportunities to become viable, by providing material and technical facilities in Europe as parameters to approximate the existing level the old Member States on yields per hectare and per animal, ensuring food

security and agricultural performance of the population. The Romanian agriculture at the end of 2007 there were approximately 3.93 million farms, of which 89.6% have an average size less than 5 hectares, 7.79% are farms that have between 5 to 10 hectares and only 0.37% of total have over 50 ha. Over 48% of utilized agricultural area is operated by units with legal personality, large and extra large. Dual character of the form of exploitation is reflected in the existence of more than 3.1 million individual household subsistence and subsistence, with an average area of 2.25 ha, OR (2005), which also hold about 90% of cattle herds 97% of sheep, 99% of the goat. In 2007 only 9,595 households had individual market sales of own production of more than 50%. Own consumption ranges on average for the country to a level of approx. 40% and in rural areas about 80%.

Number of farms directly eligible for Community support is 1.245 million. About 60% of the total households remain outside the system if the owners do not associate support for accessing European funds for agricultural and non-agricultural activities diversified. This remains a priority objective of national agricultural policy since rural areas have important natural resources and a large work force poorly used in small individual households.

Romanian economy's dependence on agriculture is a strong handicap to approach European levels of economic development. Share of agriculture in GDP was in transition at very high, between 12-18%, decreased to 7.8% in 2006 and 6.8% in 2007 due to overall economic development, but also the conditions bad weather affecting agricultural production (excessive drought, floods). Agricultural contribution to GDP compared with the share of active agricultural population in total employment (about 30%) reflects a low level of agricultural labor productivity gaps of about 1:8 to old Member States. Large numbers of people active unemployed or partially employed in economic activity led to a migration of excessive rural labor to countries young European members of the European Union and following the abandonment of agricultural activity, especially in households.

As a result of agricultural policies did not support the economic organization of small farmers, especially in the creation of infrastructure for storage, processing, transporting and marketing their products, about 3 million acres per year remain fallow. Lack of investment in the modernization of agriculture and rural areas increased market imbalances and volatility in food prices due to low yields and difficulties in market access for producers direct. Large annual crop losses due to difficulties in contracting and transportation of products, and the lack of storage space. Most farmers sell their crops directly in the field, at low prices, lack of deposits held by the association which can provide much lower costs than the big stores.

The state of agricultural production has worsened in the past 18 years, tending toward a more unbalanced structure: in 2007, 60.2% is the value of plant products, and only 38.3% of the value of animal products, the opposite of the structure consumption. Agricultural supply has declined to a smaller number of products, cereals and oilseeds have very large weights (in 2007 the share of cereals cultivated area was 65.4%, 17.2% plant oil), and beet crops sugar, flax and hemp, tobacco, fodder, etc. areas have reduced.

Wheat production, subject to annual climate variations and lack of storage capacity, not supplying rhythmic processing sector and therefore increase bread prices in January-June when stocks fall. The trend of excessive growth of area under oilseeds (rapeseed and sunflower) for biofuels, as a result of Community support supplement per hectare (an area

of 3.1-fold increase in 2007 compared with 2006 to rape), disturbances in ensuring rational crop rotation and crop structure removed from the major corn and barley business to the detriment of the livestock sector. The degree of self-sufficiency in domestic market knows and has high annual variation trend wear. In 2007, the level of supply was 97.2% grain, 97.9% in potato (in circumstances where small producers have remained unsold due to large amounts of existing difficulties in organizing the market), 92.2% for vegetables, fruit 73.9%, 17.6% sugar, 100.7% for milk and milk products, 101.1% for eggs, meat and organs 63.5%, 16.3% fish, 82% vegetable and animal fats. This indicator, which reflects the low level of consumer gratification needs of national production, worsened in recent years, although most products Romania can achieve efficiencies close to those in western European countries with similar natural conditions. In 2007 agricultural production was heavily affected by excessive drought. In 2008, although high yields were realized there were no reductions in food prices due to strong network marketing defavorizeză farmers and agricultural policy mechanisms that no effective measures to ensure the concentration of supply, transport and warehouse. Livestock sector is in decline further, both in terms of livestock and production, except for cow's milk.

Romania faces imbalances agricultural market is not fully functional. Offer is poorly diversified domestic and imported products play an increasingly important role in sales volume in urban areas. Food prices are high relative to household income and the prices of some products exceed EU countries, is an important determinant of inflation as food costs have more than 40% in the consumer basket. In today's soaring prices of cereals and other agricultural products in international markets, rising food prices in Romania and the need for integration into EU structures, restructuring and modernization of agriculture in reducing and eliminating disparities in development are priorities of economic policy.

3. Agriculture and rural development objectives for 2007-2013

The food crisis in poor countries and pressure on agricultural markets due to energy crisis and climate change policies require global emergency. Doubling the price of basic foods, particularly in urban areas in poor countries and escalating world prices of agricultural products, while meat and milk demand in emerging countries, and increasing use of part of the harvest of cereals and oilseeds biofuels (20% of U.S. corn were used for ethanol production in 2007) put strong pressure on markets. In the context of lower grain stocks to the lowest level (since 1995) reduction policy in EU intervention stocks and production of drought damage in many areas of the world, excessively high prices have benefited speculators and holders deposits. The lack of infrastructure, small producers could not benefit from high prices in this period. Food security has become a major international concern, which requires emergency action and change some rules in agriculture today. These changes are designed to protect natural resources and creating transport and storage infrastructure products, network marketing organization, to assist the great mass of farmers.

Addressing structural and operational problems of the institutional system of agriculture in Romania's European integration process is an important way of overcoming the situations to which the elimination of disparities in economic development and social peace disturbed by high and rising prices of food, produced in quantities increasing imports. Broken paths in food products since 1990 and their lack of measures to restructure the ownership and

operating the new structures have resulted in increased imports and the entry of large supermarkets, Romanian farmers and processors are becoming more dependent on retail outlets that secure conditions acquisition and food prices. Small producers are virtually non-existent on the market, as well as retailers. The purchase prices for agricultural products and foodstuffs offered by supermarkets for Romanian producers are poor while their income increases as a result of soaring prices. In the current international situation in which Romania difficulties in structural adjustment in agriculture and reduction of disparities compared to EU Member States, a national policy of granting real priorities for the sector is badly needed. These priorities cover both ways of achieving the overall objectives which fall within the strategic guidelines of the European Union and European integration meets the needs and solving specific national targets.

The main overall objective of ensuring that the EU policy are:

- Promoting sustainable consumption and production model, along with protection of ecosystems and decoupling economic growth from environmental degradation. These objectives are the future arrangements for Romania to increase food production in sustainable ways for food security and food safety, while improving the production system in order to stop land degradation and natural resource protection;

- Improving competitiveness of agriculture and adding value throughout the food chain. This objective meets the need of organizing channels on the product, economic growth performance in agriculture and food industry, modernization of marketing channels;

- Helping farmers adapt to climate change and energy saving. This can be achieved by supporting Romania reorganization of agricultural research thoroughly marginalized and lacking financial resources for investment and training of researchers, improving the management at farm level and the institutions that apply to agricultural policy mechanisms;

- Implementation of good agricultural practices, forestry and processing to ensure consumer safety and food safety. This objective allows the Community Benefit that requires compliance requirements to facilitate access to the Romanian market and unique food products to ensure public health.

- Diversification of rural economy, modernization of villages, implementation of cultural heritage in rural areas, etc.. These objectives financed by the National Rural Development Programme 2007-2013 are meant to solve a number of shortcomings related to the creation of jobs for youth stabilization, improved social conditions, revenue growth, etc.

These general objectives common to all European Union member states are added to a series of specific targets for recovery and modernization of the Romanian agriculture, as:

- The formation and consolidation of farm enterprises, and the associative family and economic organization throughout the food chain. By achieving these goals are stabilization of the internal market and increased productivity of natural and human capital in rural areas;

- Measures to accelerate the European integration process towards consolidation of agricultural land and farm planning organization formed after the producers association;

- Promote and expand the varieties and hybrids created by the Romanian scientific research that adapts agricultural conditions in different areas and provides increase in average yields, yields to levels closer to the EU 15;

- Support of investment in agriculture and rural economy to ensure that revenue growth and stabilization of youth;

- Modernization of irrigation systems through rehabilitation and adapting them to new land management structures and construction of economic systems based on low energy

technology in the context of climate change and excessive drought in southern areas of the country;

- Creation of rural infrastructure and agricultural services, transport, storage and marketing of products to ensure access of small and medium market;
- Diversification of economic activities in rural areas by developing small and medium enterprises in tourism, agricultural products processing, etc. various rural services. to increase the number of jobs and providing alternative incomes;
- Public intervention to correct market dysfunction selective agricultural policy mechanisms to ensure food security, protection of renewable resources and agricultural products more competitive. These objectives are additional measures of support from the national budget and attracting external sources other than those set by existing agreements with the European Union (EU sources of support, external loans);
- Reorganization of agricultural research and support agricultural education in rural areas to eliminate the fundamental gap separating Romania from developed countries. Achieving these objectives will contribute to structural changes in depth and limiting rural migration.

Conclusions

European Union of 27 Member States has the strategic directions to integrate agriculture and rural environment for sustainable development to cope with economic risks and uncertainties, environmental, social and health. New challenges on the global market instability and food crisis have emerged under the impact of climate change, degradation of natural resources and soaring energy prices. The effects of income inequality have generated and rising food prices. As a result of these disturbances, and the predictable results of the negotiations of the WTO on agricultural trade liberalization, the European Union and its Member States shall adjust some provisions of the development strategies aimed at increasing food production in sustainable ways, protect natural resources and increased global market competitiveness of European agriculture Community development in Romania are the conditions under which agriculture has not yet made the expected progress in adapting its structures based on competitive market demands, while the national economy is growing in 2000. To overcome this situation, which limits the expansion potential of the agricultural economy and measures are required to accelerate the modernization and organization of agriculture in sustainable use of renewable and non renewable resources for food security and economic equilibrium. Although Romania is not facing a food crisis, agricultural production is highly dependent on climatic conditions. Market imbalances have widened in the absence of coherent agricultural policy to ensure a certain continuity of funding during the transition period, due to the destructuring of products in the reform process and difficulties adapting to European agricultural model. Restoring private ownership of land has been separated from their organization and operation were not created to provide basic infrastructure services necessary for the production and marketing of agricultural products. Financing agricultural policy measures is still lacking, both in terms of ensuring the necessary funds and bureaucratic system of allocating them. Therefore, Romania is facing imbalances in the market conditions are not rationally use land particularly favorable to obtain a competitive agricultural supplies. Large annual variations in crop conditions in which the yields per hectare and per animal is about half the EU15 average does not provide the power necessary at affordable prices, especially

for vulnerable population groups. The perpetuation of this situation and in years with high yields because of lack of storage and marketing structures, inflated and unjustified prices for food imports.

In the new global conjuncture, the threat posed by climate change and escalating energy prices requires a new approach to the role of agriculture as a balancing factor for Romania's economic growth model.

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E-GOVERNMENT: A DRIVING FACTOR FOR STIMULATING INNOVATION PERFORMANCE IN ROMANIA?

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The development of public services is one of the priorities on the agendas of all policies, both national and European. One of the most recent concerns of the European Commission, as shown in the 2010 Innobarometer, is to find ways and develop strategies to support the innovation in the public administration sector, in the context of the continuously changing economic background. In this paper, we'll investigate the relationship between e-Government, and the overall innovation performance at national level, for some European Union countries. e-Government is already a known concept, widespread in the world, promoting the implementation of information and communication technologies in the public administration, in order to provide better public services to citizens and businesses. A main component of the e-Government concept is the "counter reform", aimed to streamlining administrative act quickly in order to respond to the demands of citizens, businesses and government structures. Innovation in e-Government will be measured with two Eurostat indicators – "e-Government on-line availability" and "e-Government usage by individuals" – while for the overall innovation performance we'll use a composite indicator – the Summary Innovation Index (SII) – from the Innovation Union Scoreboard (IUS). In Romania, even if the values of these indicators are not at the level of other EU countries, we can say that the situation has improved and electronic public services are being used increasingly often. The study also includes a comparison between two „modest innovators”: Romania and Bulgaria. Regarding the overall innovation performance, according to the 2010 Innovation Union Scoreboard ranking, Romania is the leader of the "modest innovators" countries, overcoming Latvia, Bulgaria and Lithuania. However, in the field of e-Government our country has major shortcomings. Romania has registered a significant progress in the years after the EU integration, followed by a setback in 2009, still having values below those of other EU countries, including Bulgaria.

Keywords: innovation, e-Government, public sector, SII, correlation

JEL classification: O11

1. Introduction

European Commission's recent concerns are focused on innovation, inclusive in the public sector. Through the "Innovation Union" flagship initiative, launched within *Europe 2020*

Strategy, the European Commission proposed, among others, monitoring innovation in the public sector using a “European Public Sector Innovation Scoreboard”. A first step towards achieving this instrument was the “Innobarometer 2010”, which was devoted to an analytical study of innovation in public administration. This document, based on a survey of 4000 public administration institutions in all 27 Member States of the European Union (EU), has shown a relatively high degree of innovation in this sector (“*at the EU level, two-thirds of public administration institutions introduced a new or significantly improved service in the last 3 years*” (European Commission 2010a: 8). The report also highlighted out *the positive effects of innovation on the activity of the public administration institutions, among which: the improved user access to information, improved user satisfaction, more targeted services, faster delivery of services, simplified administration, improved working conditions or employee satisfaction, and cost reduction resulting from innovations* (European Commission 2010a: 9).

E-Government or electronic government is the use of ICT in public administration in order to improve public services provided to citizens and businesses. Implementing electronic government is not an easy process. Providing user-centered public services designed to reduce bureaucracy involves profound organizational changes. Thus, the transition to e-Government meets resistance because many times, although efforts involved are obvious, benefits they bring can be seen only over time. These benefits, however, play an important role in social and economic model of Europe, being the starting point in ensuring a higher level of welfare for its citizens, leading to economic and social cohesion and supporting the development of a functional market economy.

In this context, we have analyzed the relationship between e-Government and the overall level of innovation at country level, in order to determine the main factors that stimulate the innovation process. This is of special importance for Romania, given that our country is still a “modest innovator” within the European Union.

2. The SII indicator – measure of Innovation performance

SII (the Summary Innovation Index) is a composite indicator that measures the overall innovation performance at country level. It has been computed since 2001 and annually published in the European Innovation Scoreboard (EIS), under the surveillance of the European Commission, through the PRO INNO Europe initiative (EIS 2001, 2002-2006, 2007, 2008, 2009, 2010). Over time the SII structure and methodology have changed, and starting with 2010, the European Commission has proposed to “abandon” the EIS and create a new instrument, called the Innovation Union Scoreboard (IUS).

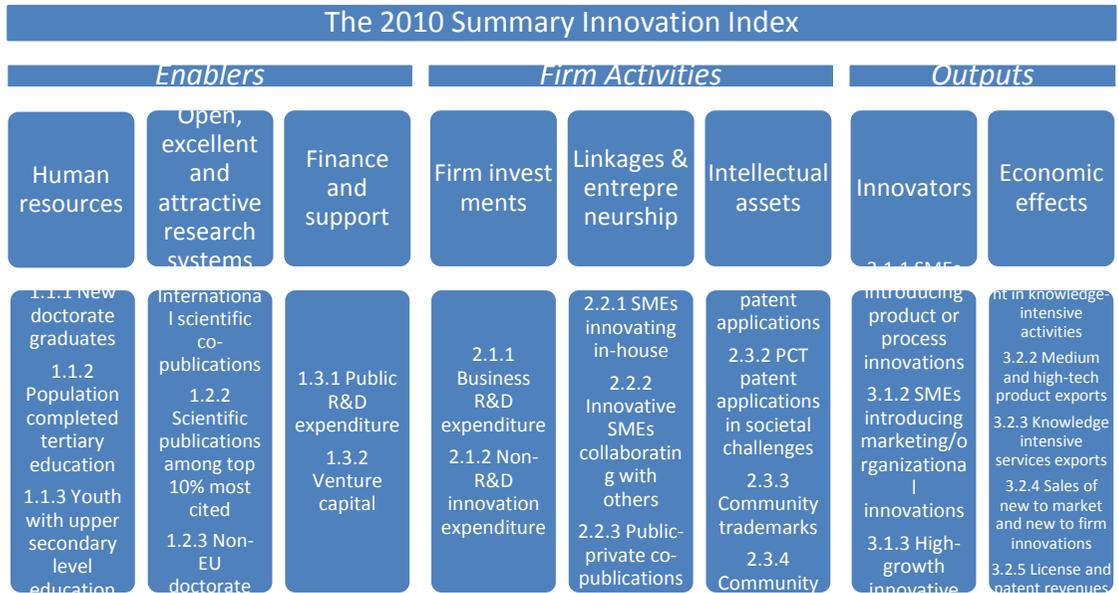


Figure 1. The structure of the 2010-SII indicator: the first level represents the three main types; the second level includes the eight dimensions which contain 25 sub-indices (Source: figure made by the authors)

The IUS purpose is to monitor implementation of innovation policies and strategies under the flagship initiative “Innovation Union”. Thus, in February 2011, the first edition of the IUS – IUS 2010 – was published, using a new structure for the SII indicator. The SII 2010 is a composite indicator that summarizes the performance of research and innovation systems at country level using 25 sub-indices, grouped into three main categories – “Enablers”, “Firm activities” and “Outputs” – and eight dimensions of innovation (Figure 1). SII 2010 includes 18 of the 29 sub-indices used in SII 2009 and 7 new sub-indices. Due to the lack of data for each of the sub-indices used in the SII 2010, only 24 of them could be effectively taken into account (the exception is the sub-indicator 3.1.3.). However, out of the 24 sub-indices, 4 relate to information in 2007, 10 to data of 2008 and 10 gives the values for the year 2009; therefore, the SII 2010 does not capture the full impact of the economic and financial crisis on innovation. Depending on the SII 2010 values (ranking), the 27 EU member states have been divided into four groups (clusters) of innovation:

- “*innovation leaders*”: Denmark, Finland, Germany, Sweden;
- “*innovation followers*”: Austria, Belgium, Cyprus, Estonia, France, Ireland, Luxembourg, Netherlands, Slovenia and the UK;
- “*moderate innovators*”: Czech Republic, Greece, Hungary, Italy, Malta, Poland, Portugal, Slovakia and Spain;
- “*modest innovators*”: Bulgaria, Latvia, Lithuania and Romania.

3. Econometric tests

We have investigated the existence and the intensity of the correlation between “e-Government” and the innovation performance at country level, registered in the EU. In this

regard, we approached the “e-Government”, both in terms of the “supply” of electronic public services (“*e-Government on-line availability*”) and the “demand” for these services (“*e-Government usage by individuals*”). Our working hypothesis was that e-Government (both the demand and the supply) is closely linked to innovation, influencing it and being influenced by this one.

3.1. The correlation between e-Government and innovation performance at country level for some EU countries, in 2006-2010

We have calculated the correlation coefficients between the overall innovation indicator *SII* and two representative e-Government indicators, respectively “*e-Government on-line availability*”⁽¹⁾ and “*e-Government usage by individuals*”⁽²⁾ for 22 EU Member States ⁽³⁾. The results, presented in Annex (Table 1) and plotted in Figures 2 and 3 reveal the four clusters of innovation (the leaders in innovation on the right side, the modest innovators on the left side).

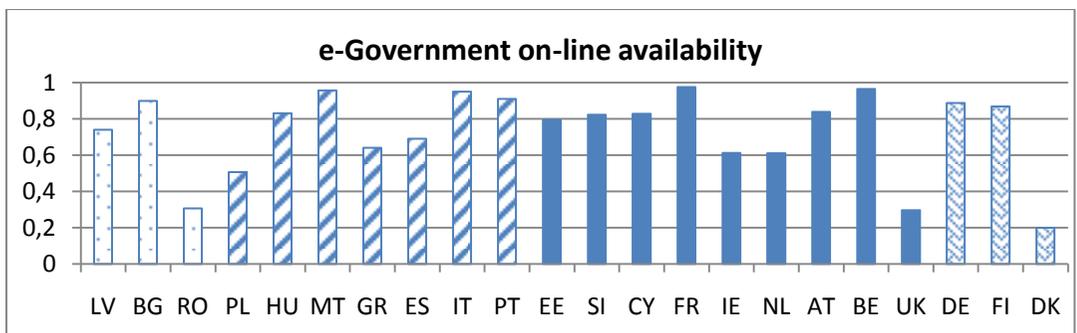


Figure 2. Correlation between “*e-Government on-line availability*” and innovation performance for 22 EU countries in the period 2006-2010 (Source: figure made by the authors)

Statistically, data presented in Figure 2 show that – although there are three countries (including Romania) that do not register a significant correlation between the two indicators, and for another six countries there is a weak linkage – the most of EU countries analyzed had a significant correlation (above 0.75), and even a strong one (above 0.90, for five countries, including Bulgaria). Generally, countries with moderate innovation level, considered as “*moderate innovators*” and “*follower innovators*” countries (according to the IUS 2010 report) present a high correlation between the innovation performance and the availability of the public service indicator.

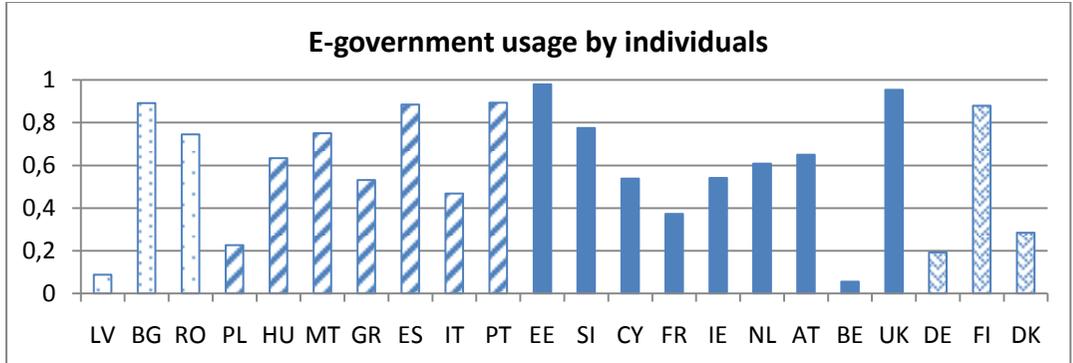
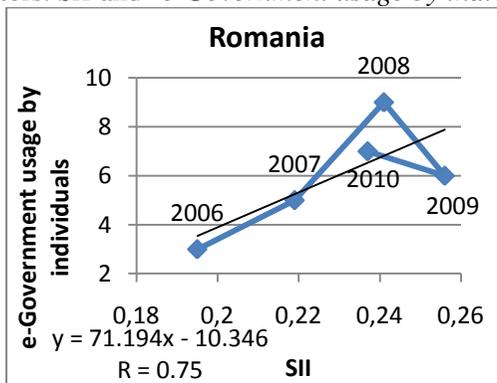


Figure 3. Correlation between “e-Government usage by individuals” and SII for 22 EU countries in 2006-2010 (Source: figure made by the authors)

In figure 3 it can be noticed that the degree of correlation between the two indicators is significant in most countries with medium level of innovation (the “followers in innovation” and the “moderate innovators” groups) and even very strong for Romania and Bulgaria, who are leading innovators within the group “modest innovators”.

3.2. The correlation between “e-Government usage by individuals” and SII for Romania and Bulgaria during 2006-2010

In order to describe the relationship between the degree of interaction of citizens with public administration, using Internet, and the overall innovation performance for Romania and Bulgaria, we have examined, for the period 2006-2010, the correlation between the indicators: SII and “e-Government usage by individuals”.



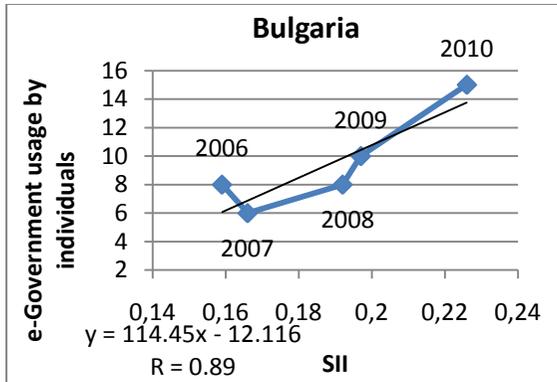


Figure 4. The correlation between “*e-Government usage by individuals*” and *SII* for Romania and Bulgaria during 2006-2010 (Source: figure made by the authors)

As it can be seen in Figure 4, the correlation between the analyzed indicators for both countries is significant, Bulgaria reporting even a very strong correlation. Both countries have made progress in terms of overall performance in innovation, following the integration in the European Union, but they had different evolutions in the period 2009-2010. Thus, Romania, unlike Bulgaria, recorded in 2010 a decline of SII value (from 0.25 to 0.23), while remaining yet the leader of the “modest innovators” group of countries, according to the classification published in the IUS 2010 report and overcoming Latvia, Bulgaria and Lithuania. Regarding the indicator “*e-Government usage by individuals*”, Bulgaria after its integration into UE, progressed steadily, with significant values that have increased from 6 in 2007 to 15 in 2010. As for Romania, it has made a significant progress after its integration into EU (from 5 in 2007 to 9 in 2008), but has reported a significant decrease in 2009 (down to a 6), and a slight recovery in 2010 (value 7).

4. Conclusions

After the integration in the European Union, Romania recorded a real progress in innovation performance, reaching in the year 2010 a top position in the group of the “modest innovators”, according to the classification published by the European Commission in the IUS 2010 Report, overcoming Latvia, Bulgaria and Lithuania. However, the SII indicator value is still very low and therefore there is a major concern of stimulating the innovation in all fields and to identify factors that can stimulate it. Through a set of econometric tests, our approach proves that the e-Government system can be such a driver.

In general, the indicators of the “supply” and the “demand” for electronic public services (e-Government) are significantly correlated with innovation performance at country level, as measured by the SII indicator for most countries of the European Union between 2006 - 2010. This suggests that improving the performances of the e-Government system in Romania, at least reestablishing the position from 2008 as a very near future desiderate, could yield to the increase of the innovation level.

5. Notes

⁽¹⁾ The “*e-Government on-line availability*” indicator is provided by EUROSTAT and it is measured as the percentage of online availability of 20 basic public services. The data are last updated in March 2011.

⁽²⁾ The “*e-Government usage by individuals*” indicator is provided by EUROSTAT and it is measured as the percentage of individuals aged 16 to 74 using the Internet for interaction with public authorities. The data are last updated in April 2011.

⁽³⁾ The 22 UE countries are: Austria (AT), Belgium (BE), Bulgaria (BG), Cyprus (CY), Germany (DE), Denmark (DK), Estonia (EE), Spain (ES), Finland (FI), France (FR), Greece (GR), Hungary (HU), Ireland (IE), Italy (IT), Latvia (LV), Malta (MT), Netherlands (NL), Poland (PL), Portugal (PT), Romania (RO), Slovenia (SI) and United Kingdom (UK).

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Annexes

Table 1. The correlation coefficients between the indicator “*e-Government on-line availability*”, respectively „*e-Government usage by individuals*” and *SII* for 22 EU countries during 2006-2010 (by group of innovation)

Modest innovators			Moderate innovators			Innovation followers			Innovation leaders		
State	Coeff1	Coeff2	State	Coeff1	Coeff2	State	Coeff1	Coeff2	State	Coeff1	Coeff2
LV	0.740	0.088	PL	0.506	0.226	EE	0.795	0.979	DE	0.887	0.192
BG	0.899	0.892	HU	0.831	0.634	SI	0.822	0.775	FI	0.868	0.880
RO	0.306	0.745	MT	0.956	0.751	CY	0.827	0.539	DK	0.199	0.284
			GR	0.640	0.531	FR	0.975	0.373			
			ES	0.690	0.885	IE	0.611	0.541			

IT	0.950	0.468	NL	0.610	0.608
PT	0.910	0.894	AT	0.839	0.650
			BE	0.965	0.055
			UK	0.296	0.954

Note: Coeff1 – The correlation coefficients between the indicator „e-Government on-line availability” and SII

Coeff2 – The correlation coefficients between the indicator „e-Government usage by individuals” and SII

Table 2 (a). Statistical analysis of the correlation between “e-Government usage by individuals” and SII for Romania during 2006-2010

<i>Regression Statistics</i>				
Multiple R	0.745			
R Square	0.555			
Adjusted R Square	0.407			
Standard Error	0.018			
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	0.183	0.025	7.172	0.006
Egovernment	0.008	0.004	1.936	0.148

Table 2 (b). Statistical analysis of the correlation between “e-Government usage by individuals” and SII for Bulgaria during 2006-2010

<i>Regression Statistics</i>				
Multiple R	0.892			
R Square	0.795			
Adjusted R Square	0.727			
Standard Error	0.014			
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	0.123	0.020	6.094	0.009
Egovernment	0.007	0.002	3.414	0.042

UTILISATION OF BENCHMARKING TECHNIQUES FOR FUNDAMENTING DEVELOPMENT STRATEGIES IN THE MANUFACTURING INDUSTRY IN ROMANIA

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Benchmarking is a method used to measure the products, services and processes in comparison to an entity recognized as a leader in terms of performance of its operations. Used in the years 1970-1980 in the strategic management of the company currently has proven to be increasingly useful in many areas, including in international analysis models. In the European Union benchmarking indicators are used especially in the digital economy and as perspective indicators for 2011-2015 (Eurostat, Database).

In the introduction we present and define forms of benchmarking, as well as a number of specific terms, which contribute to a better understanding of the content of this scientific work. Time series are used to highlight advances in labor productivity in EU countries, and the analysis is particularized for two countries: Romania and Germany. Quantitative data were collected from the source Eurostat website.

A comprehensive indicator at macroeconomic level is resource productivity, representing GDP in relation with domestic consumption of material (DCM). DCM measures the amount of materials used directly by an economy. It is presented in tabular form for all European Union countries and Switzerland, as evolving over a period of eight years.

Benchmarking method is used to highlight some differences (gaps) between EU countries regarding productivity and particularly the one between Germany and Romania is highlighted, concerning the performance of manufacturing industries. It is expected that this gap will diminish. The gap was highlighted by relevant graphics and interpretations.

The second part of the paper focuses on comparative analysis of factors productivity using the production function. We analyze labor and capital productivity and other factors that determine the level of production. For highlighting the contribution of the labour factor we used the number of hours worked, considering that it reflects the analyzed phenomenon more realistically. For highlighting the contribution of capital factor we used as an indicator the capital stock in euros, available for Germany in the Eurostat database, and for Romania in the Statistical Yearbook 2009, expressed in RON, as comparable prices and then converted into euros at the average rate calculated by the NBR. The results for the entire manufacturing industry represent the basis for further expansion of benchmarking to the main components of this industry, especially automobile building, transportation

vehicules, furniture, clothing, leather chemical, etc., providing a scientific basis to fundament the economic policies including commercial ones.

Keywords: benchmarking, labor productivity, resource productivity, capital productivity, sustainable development strategy

JEL Codes: F15 - Economic Integration, F31 - Foreign Exchange, L6 - Industry Studies: Manufacturing

1. Introduction: Characteristics of benchmarking

Benchmarking - a process that aims at seeking solutions to enhance the performance of the organization, based on the best methods and procedures of the industry. Setting business goals based on optimal methods and procedures existing in the industry are an important factor in the success of business strategy.

Benchmarking techniques were originally developed in strategic management in order to identify aspects through which one can compare an organization with similar organizations, even though they may function in a different industry or have a different target group of customers. In addition, benchmarking can be a valuable tool to identify areas, systems or processes that need improvement, which can take the form of a continuous development or of a dramatic change as business process reengineering.

There are several types of benchmarking, the most common being: - Technical benchmarking - involves identifying products and services capability, especially in comparison with similar products and services of leading competitors, market leaders, using a scale of 1-4 (4 being the best score) to quantify properties of products and services from your organization. If input data about products and services are difficult to obtain, they may be regarded as inappropriate to be competitive.

- Competitive benchmarking - involves a quantification of the main attributes, functions or values associated with products or services, so you can make a comparison between them and those of market leader (Sherman and Zhu, 2006)

- Functional benchmarking – represents using benchmarking methods to compare a particular business function in two or more companies (Lerna and Price, 1995). Camp (1989) defines it as a particular function comparison with best practices in that area.

Our aim is to conduct a study on industries in different countries using benchmarking. The research methodology consists of preparing the statistical series for a period long enough to show realistically the phenomena investigated, on productivity in EU member states and highlighting indicators of efficiency in manufacturing production in Romania and Germany. The indicators were estimated using the Cobb-Douglas function of production for the manufacturing industry in the two countries, using data according to CAEN Rev.1.1 (including 2008).

2. Literature review

The International Association Global Benchmarking Network (GBN) is joining private and public institutions, non-profit or research organizations which have expertise in benchmarking. The role of this association is to share knowledge and capabilities in the field of benchmarking through exchange of experience between its members and promoting the best practices identified. Through the association's members, who are from different parts of

the globe, the association keeps in touch with the current stage of development in the field of benchmarking and enhances the development of this branch of study.

In order to use benchmarking techniques it is essential to have a common understanding of specific terminology, which enable experts to express their ideas in a concise manner. In this respect GBN association has developed a glossary of terms. For a better understanding of this research paper, we considered necessary to present a selection of some relevant terms from the glossary of benchmarking terms, as it follows:

- Benchmarking Gap - represents the difference in performance between an activity conducted at a company and the same activity at other competitors on the market.

- Benchmarking of sectors - compares performance of two sectors, the purposes of comparison being to take best practices from one sector, and applies them to the weakest sector on that particular criterion.

- The productivity of capital - is an economic indicator of productivity, which measures the level of output (in euro or dollar) made for each euro/dollar invested in fixed assets.

- Core competence - a company's strategic capability, which gives them a market advantage.

- Productivity Benchmarking - provides companies with a systematic method to compile indicators of economic growth in order to create a table of economic productivity used to identify activities and processes which do not add value, but represent an additional cost. Another important concept that will be used in the proposed research is that of labor productivity.

The generally accepted definition of labor productivity is quantity of production obtained per unit of labor, which can be represented by the number of hours worked, number of employed persons (employees and other categories) or number of employees. The version which takes into account the number of hours worked is the most used, reflecting more realistic the phenomenon analyzed. The labor productivity determined using the number of employees, it is easier to calculate, but the quality of results is more modest. (Bolstorff and Rosenbaum, 2003)

Labor productivity can be determined for different representations of economic performance: total production or gross value added. We opted for the last presented expression of performance. Statistical data show significant differences between countries on this indicator.

3. Research Methodology

The research objective is to realize a comparative study between the performance of industries in different countries, and we chose Romania and Germany in particular. The research methodology consists in taking the benchmarking method, and apply it in research of industry performance, comparing different countries of the European Union (to complete the picture of the studied phenomenon, we introduced the comparisons also Switzerland).

We sought to highlight indicators of manufacturing production efficiency in Romania, taking specific indicators in Germany as point of reference.

It should be noted from the very beginning that, during 2000 - 2007 (2008), for which we had available statistics provided by Eurostat, Romania has a notable gap compared with Germany.

4. Comparative analysis of labor productivity

Regardless of the calculation method (see Literature review), labor productivity is only a partial measure of productivity, showing the cumulative effect of several factors: mainly capital and intermediate consumption, and technological and organizational efficiency, economies of scale or potential growth in utilization of production capacity. A comprehensive indicator at macroeconomic level is resource productivity, representing GDP in relation with domestic consumption of material (DCM). DCM measures the amount of materials used directly by an economy. In table 1, this indicator is presented for the EU members and Switzerland for the year 2007 compared with 2000.

Table 1: Resource productivity in the years 2000 and 2007 in EU countries and Switzerland (EUR per kg)

	2000	2007		2000	2007
UE 27	1,21	1,3	Lithuania	0,44	0,43
UE 15	1,4	1,57	Luxemburg	2,78	4,32
Belgium	1,32	1,47	Hungary	0,45	0,6
Bulgaria	0,13	0,14	Malta	3	2,14
Czech Republic	0,33	0,42	Holland	2,16	2,6
Denmark	1,28	1,24	Austria	1,41	1,4
Germany	1,41	1,71	Poland	0,32	0,38
Estonia	0,32	0,27	Portugal	0,66	0,62
Ireland	0,63	0,66	Romania	0,18	0,14
Greece	0,88	0,98	Slovenia	0,48	0,46
Spain	0,93	0,9	Slovakia	0,4	0,49
France	1,64	1,8	Finland	0,76	0,79
Italy	1,25	1,6	Sweden	1,71	1,79
Cyprus	0,66	0,64	United Kingdom	2,11	2,54
Letonia	0,24	0,31	Switzerland	3,05	3,36

Data source: Eurostat, Statistics, Sustainable Consumption and Production

We observe that the pursued indicator values are dispersed (from 0.13 Bulgaria, 4.32 Luxemburg), for 18 out of 28 countries (including Switzerland) the value of indicators has increased, most important being in Luxembourg, United Kingdom, Switzerland, Germany and Italy; for other 10 countries the value of the indicator has decreased, highlighting a diminish of efficiency in resources utilization.

To emphasize the important differences between countries on the resource productivity and its changes over time, we presented in chart 1 a upwards ranking of countries by indicator values in 2007, based on data in Table 1.

It appears that both the EU 27 and EU 15 increased in resource productivity, and former socialist countries, now EU members, without exception, are at levels below the EU 27 average.

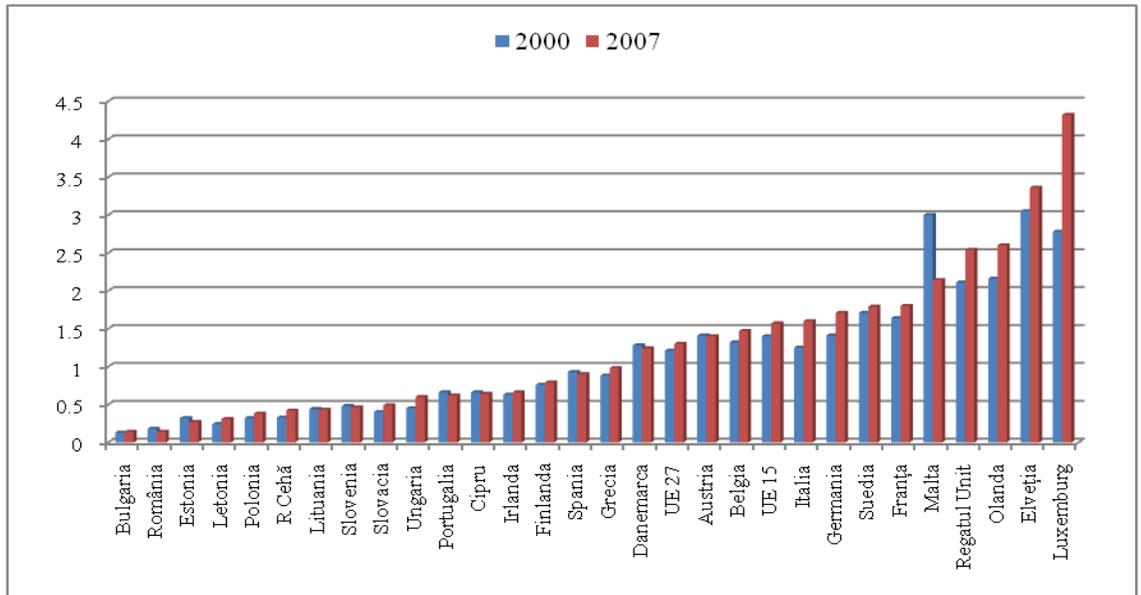


Figure 1: Comparison between the productivity of resources in 27 EU countries (and Switzerland) and Romania in 2000-2007

Source: Based on data from Eurostat Statistics, Sustainable Consumption and Production

Romania, as well as Bulgaria, is experiencing an amazingly low level of this indicator and, unlike Bulgaria, has recorded a decrease in time. Figure 1 shows a comparison between the evolution in time of the indicator in Romania and the European Union average.

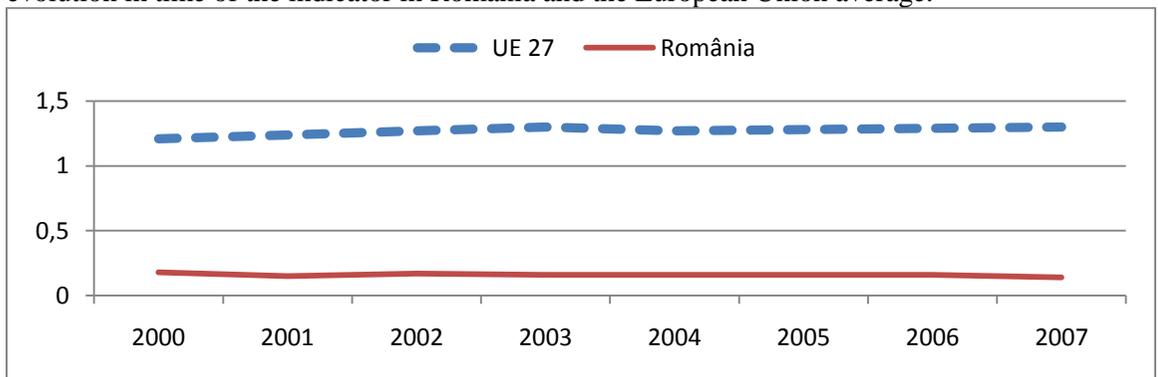


Figure 2: Comparison between the average productivity of resources in EU 27 countries and Romania during 2000-2007

Source: Based on the data from Eurostat, Statistics, Sustainable Consumption and Production

5. Capital productivity and capital stock

Capital productivity index shows the economic result (gross value added) produced by a certain amount of immobile productive capital.

To measure the capital stock involved in a production process, literature and empirical analysis recommends several methods:

- The flow of productive services provided by an asset in the production process;

- Gross stock of capital obtained by cumulating the investment flow, adjusted by the rate of removal from service of capital goods.
- The net stock of capital obtained by correcting the gross stock capital with the loss of productive capacity.

Given the availability of statistical data, we used the gross stock of capital to estimate the coefficients for the production function. In the process of estimating the production function coefficients, we have highlighted the contribution of other factors, besides labor and capital. Multifactor productivity (MPF) allows the identification of distinct contributions of labor, capital, intermediate consumption and technology/efficiency to the final production. This contribution is shown by indicator PMF - KLEMS (capital-labor-energy-materials-services), considered to be the most comprehensive measure of efficiency at industry level, calculated only for 25 countries from the EU, Romania and Bulgaria being excepted.

6. Results of the research and conclusions

For econometric estimation of production function coefficients for the manufacturing industry in the two countries, we used statistical data about gross value added (VA), the number of hours worked (HEMP) and gross capital stock (KGFCF) from the Eurostat database for Germany and the corresponding data of the same variables in the Statistical Yearbook of Romania 2009. Variables were converted from RON to euro for Romania, using the average annual exchange rate, published by the BNR. Before 2000, the exchange rate seemed to distort the value sizes studied, so we decided to limit the time series data to the period 2000-2007, although statistics provide data since 1995. The production function has the following expression:

$Y = A * L^{\alpha} * K^{\beta}$, where Y, L and k are respectively VA, HEMP and KGFCF and the exponents are elasticities of output (production) to input (production factors). A expresses the contribution of other factors, besides labor and capital. The values estimated using multiple regression are summarized in Table 2.

Table 2: Estimated coefficients for the production function related to the manufacturing industry in Romania and Germany for the period 2000-2007.

	A	α	β
Germany	19,04085387	0,857702548	0,146318628
Romania	0,581636175	0,052085522	0,972634345

Source: made by author based on econometric calculations

In Germany the elasticity of production to labor is 0.86, that means work contributed decisively to the increase of production in the period studied, while in Romania it is close to zero. Coefficient A shows the effect of technical refinements, organizational, etc. over production growth: it is high in Germany and low in Romania. Unlike labor factor, capital factor has had a remarkable contribution to increasing the production in Romania (although this increase was modest). We provide those interested many useful statistical data series concerning the investigated theme.

We believe that the elements outlined above can represent the base for analysis for all Romanian manufacturing industries because the comparison of them with several leaders of the world economy can represent the scientific fundament necessary for elaboration of economic policies.

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FOREIGN DIRECT INVESTMENT AND INNOVATION: AN ANALYSIS OF SPILLOVER CHANNELS

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Stimulating innovative behaviour has become a priority at EU level under the Lisbon 2010 and Europe 2020 Strategies, which considers innovation to be the engine of economic change. There is a rich literature focused on role and effects of FDI on innovation, competitiveness and economic growth. Among the generally recognised benefits deriving from the presence of FDI in an economy the following could be mentioned: financing a savings gap or balance of payments deficit, increasing exports and earning foreign currency, and increasing employment. But these, although important effects of FDI, would not alone justify the preferential policies FDI enjoys from a large number of governments. Therefore, it can be generally assumed that FDI is accompanied by new technologies and knowledge, which has a positive effect on the host economy. Technology diffusion from MNCs could contribute, but not in any cases, to the enhancement of innovative performance of domestic firms. The structural effects of FDI are present both within the industry, where they occur through horizontal linkages (competition), as well as in other industries through vertical linkages (backward and forward linkages). Especially for the case of structural effects, empirical literature has indicated both opportunities and risks for the local economy, the final outcome depending on the balance between benefits and costs. While these size effects of FDI may well be vital in certain circumstances, they have no long-term effect on economic growth. A large number of countries have adopted policies attracting foreign direct investment, based on the general belief that the role of FDI goes beyond that of mere financing alternative for firms and the economy. Positive external effects for the growth of the host economy are expected as a consequence of technology transfer and efficiency spillovers. A good knowledge of the underlying mechanisms of these spillovers is indispensable for a sensible policy orientation. FDI has an impact on innovation through demonstration effects and reverse engineering, labour turnover, competition and inter-industry linkages. This paper endeavours an in-depth look at the current research on transmission channels of the impact of FDI on innovation and to identify new directions for scientific research and to discuss policy alternatives in the field in Romania. The conclusion which could be drawn from the analysis of spillover channels of FDI on innovation and the review of current empirical research related to this topic is that the positive effects of FDI on innovation seem to be conditional. FDI and recipient country heterogeneities determine whether the positive effects of FDI outweigh the costs. Therefore it is important that policy measures regarding FDI are supported by empirical research studies. Considering the fact that empirical literature regarding the impact of FDI on innovation consists mostly of country studies, results cannot be easily generalised. To be more supportive for policy-makers, research on this topic should be more integrated (the effects of FDI, R&D and trade on innovation should be analysed in a common framework) and should focus more on cross-country studies with a generous time horizon to ensure long-term effects are also captured.

Keywords: foreign direct investment, spillover channels, innovation performance, technology transfer, innovation policy.

JEL classification: F23, O31, O33. F21; F23; O14; O30

1. Types of effects of FDI on the host companies

The interest in attracting the foreign capital through direct investments of the multinational companies as ‘greenfield investments’ or ‘joint ventures’ is, especially for the governments of the developing countries, a strategic priority, being encouraged by the existence of a multitude of benefic effects which the FDI produces in the host country on different time horizons, which is mentioned both in the theoretical and empirical studies (5, 6).

Even if faced with the effects of the crisis, in the context of an increase in the number of regional integration processes and globalization of markets, the interest of the multinational companies for the strategic placement of the direct investments in order to obtain or maintain the competitive advantages continues to be visible with different intensity in geographical areas, countries or areas of activity (11).

The economic theory argues, in many studies, that in the context of appropriate policies of the host country, FDI can accelerate the sustainable economic growth through investment in physical and human capital that will determine potential positive externalities, evidenced by increases in the level or the rate of productivity in the long run, at regional or national level, or by an increase of the rate of the technology transfer and, consequently, the degree of innovativeness of local firms (7). Experts argue that the foreign direct investment is a source of new technological and management knowledge, incentives for scientific research, technological development and innovation and, therefore, an endogenous factor of sustainable economic growth.

The literature (9) identifies the following **types of interactions** between the multinational company and the local firms, which determine externalities (spillover) on the vertical axis, which may intensify the degree of innovativeness of the latter: support for potential providers to operate production units in order to offer new products and technologies; stimulating the demand for high quality products; offer technical assistance or information necessary to help improve the products or to facilitate innovativeness; assistance in order to improve the management; support the local providers in attracting other similar customers, by placing them in other subsidiaries of the same multinational companies; increase of the demand in the intermediate products market, which favors obtaining benefits from the economies of scale; the effect of competition.

Also, the quality requirements imposed by the multinationals in the contractual relationships with both suppliers and distributors, encourage and even force the improvement of the processes or products and services offered, often through innovative activities, which may trigger a higher training effect in the upstream and downstream industries.

The main way through which the presence of FDI determines beneficial effects on the innovativeness of the local firms is the one of **the positive externalities of knowledge**, which, through various mechanisms, facilitates the access of a potential local innovator to the results of the research conducted by the company with foreign capital.

One of the most important channels for the transfer of knowledge (spillover) of FDI on the innovativeness of the local companies is the so-called **demonstration-imitation effect**. The mere presence of the foreign products on the local markets can stimulate local markets, at different levels (intra-industry, inter-sector), the creativity of the local firms, thus supporting

the generation of new projects, such as products and technologies by the learning process during the execution 'learning by doing' which is associated to the vertical externalities, or, by the observation and the imitation of the local firms operating in the same industry of the results of R&D projects developed by the multinational company.

The process of identifying innovative solutions (through repeated attempts) is thus shortened and the risk of innovation in similar directions by local firms is lower, since the goods and technologies promoted by the firm receiving the FDI have been already tested in foreign markets. This effect is noted by stimulating the 'innovation in the mirror' especially in markets in which the variety of the offer was reduced before the entry of the foreign investors but the potential for innovativeness was highly enough.

Secondly, the new knowledge and technological externalities arising from local firms may be dependent on the *human resource mobility*, the movement of personnel from the company with foreign capital towards the competing domestic companies. Often, the employees of the foreign company open their own businesses, addressing the niche markets covered by the multinational. In any case, the technological knowledge acquired by the workers or the managers who leave the foreign company has the ability to increase the innovativeness performance of the firms in which they are integrated. The foreign companies seek to avoid, by appropriate personnel policies and other precautionary measures, this leakage of value which carries the competitive advantage.

A third mechanism to trigger the externalities associated with the FDI is the so-called *competition effect*. The imbalance occurred in the balance of power in the local market penetration endorsed by the foreign company, requires competitors to make efforts towards the modernization and improving of the production techniques and technologies in order to withstand the competitive pressure. If the aggression of the foreign rival is high and the technological distance between it and the local industry is significant, the effect of competition can lead to the elimination of local firms, respectively, the reduction of the productivity of the local industry.

Through the **effect of export** the improvement of the competitiveness on export of the local industry by learning from foreign subsidiaries (the latter being thus, a derivative of the demonstration effect) may take place.

2. The potential effects on innovativeness

The impact of FDI on innovation at the local level can be evaluated by positively modifying some of the indicators of innovativeness. If we consider the set of indicators that make up the Synthetic Index of Innovation quantified in the European Innovation Scoreboard, we may notice that the references of the industry experts on the positive effects of FDI on innovation covers most of these indicators. The FDI has the role to promote the technological progress as the local firms have a greater chance of observing the advanced technology used by the firms with foreign capital, which contributes to the faster growth of their technological level. Transposed to the indicators contained in the European Innovation Scoreboard, this effect means the growth of employment in the manufacturing industry which uses medium and high technology.

Also, in the case of a developed market with local competitors which have developed the capacity for innovation and absorption at a sufficiently high level, the penetration of the foreign company could be an incentive for innovation as a source of competitive advantage and survival in the market, process suggested also by the Schumpeter's theory. This, as in

the case of vertical externalities, would alter some of the indicators such as the growth in the sales volume of the new products for the company and even for the market, by increasing the number of patents, trademarks, and export of high-tech products (7).

Some authors (3, 9) have presented models of the effects of FDI on innovativeness through the investment in the human capital, noting that there is a direct link between increased FDI and the improvement of the local human capital, with consequences on the growth of the potential of the recipient country to absorb new technologies and therefore to reduce the technological gap and innovativeness compared to the developed countries. The capacity to make new products increases, both for the business and for the market and the export of high technology products increases.

The incorporation on extensive scale of new knowledge about technology, management methods and new products and processes associated with FDI is a quality input in the production of physical capital, resulting in increased productivity of all other factors of production. Overall, the positive effects of FDI manifest themselves in the increase in the productivity of local companies (4).

A distinction between the long-term approach and the short term approach is required as well as a specific analysis of firms belonging to different sectors of manufacturing. The increase of the stock of knowledge leads to a change in the optimal allocation of resources and management effort within the firm between the current production and the capital accumulation specifically in favor of the latter, which, although may lead to lowering short-term productivity, increases the rate of productivity on long term. In this model, the essential feature is that the transfer of technology, even as spillover does not happen automatically but is a costly learning process.

But, the empirical evidence doesn't always support the theoretical arguments listed above. A series of studies on the subsidiaries of the multinational companies located in developing countries, did not reveal the transfer of technology from foreign company to the local (1,5) or the negative externalities associated with FDI on the productivity of the local firms either. The explanation given to these observations was based on the assumption of 'market stealing', the argument is that the firms receiving foreign capital gain the market share of the local firms, forcing them to produce less at higher average costs. Thus, in overall, the positive externalities may be lower than the negative ones.

The effects of FDI on local innovativeness differ from one type of investment to another as the participation of companies with local market experience implies already existent strong links with the local suppliers. In the short term at least, due to the cumulative effects offered by the creation of new production capacity, the contractual experience with the upstream industry, the emergence and capitalization of the channels of externalities is likely in the case of FDI through acquisitions or mergers than in the case of foreign investments held on greenfield.

On the other hand, the investments through acquisitions, mergers or joint ventures can lead to an degree of concentration increased, with an effect of discouraging the local investment in R & D, anti-competitive behavior (6). Thus, the impact of such type FDI on intra-industry externalities can be reduced in proportion to the intensity of the competition in the industry.

An empirical study (6) conducted on the Romanian companies, confirms the hypothesis that the ownership structure of foreign direct investment significantly affects the intensity of horizontal and vertical FDI externalities. Especially in the context of local industries with lower technological level than the parent company for companies with mixed capital (local

and foreign) it is more convenient (in terms of costs) compared with those with foreign capital, to look for partnerships with local suppliers of intermediate products and raw materials. This implies that the potential positive externalities on local producers from the upstream industry is higher in case of joint / ventures.

Secondly, as far as the horizontal externalities are concerned, it is noted that the multinationals tend to transfer less complex technology that they have in the subsidiaries with local shareholders than those with foreign capital. This, together with the increased access to technology together with the participation of local shareholders in joint projects, enhances the absorption of technology by the domestic firms in the same sector. Furthermore, the findings of the study show that the negative effects of FDI flows associated with the increased competition from the horizontal axis are lower than in the case of joint venture investments with foreign capital.

The hypothesis that the level and complexity of the externalities depend on the geographic proximity of the potential beneficiaries has also been confirmed by the empirical studies. Both horizontal and vertical externalities' capitalization is more efficient if the beneficiary local firms are located closer to each other, thereby facilitating the flow of knowledge. The main spillover channels, such as the labor force movement, the formal and informal relations between the staff of the foreign company and the one of the local business and the supplier-customer relationship as well, work best between firms spatially grouped.

Also, the relations between the multinational and the local industry depend on the extent to which the foreign business's activity involves the intensive consumption of intermediate goods, the costs of communication between the subsidiary and its parent company and the degree of similarity between the market in the country of origin and the host country.

For the potential FDI externalities to become real, a decisive role is the one of the technological and human capabilities of the host economy. The size of the target market, the local regulations and the technological capacity of the local firms influence the size and intensity of the connections between the foreign company and the domestic industry. In this respect, policies that not only will increase the economic attractiveness for foreign direct investment in high technology industries must be developed, but also to encourage the cooperation in research and development and innovation projects between the multinational and the local companies and to pursue the increase of the capacity for local absorption and innovation.

Although the existence of a technological distance between the foreign and the local firms makes possible the emergence of positive externalities of FDI on economic growth, through the various channels mentioned above, it must allow the local firms to develop and improve their own products and processes through the integration, adaptation and application of the knowledge technology provided by the multinational in their innovative activities. Perez and Soete (8) found that the occurrence of positive externalities in the innovation of a company requires a critical level of technological and scientific knowledge and skills. Beyond this limit, the cost of integration and adoption can become prohibitive. Moreover, as the distance between the transmitter and receiver of technology is higher, the intensity of the spillover channels is lower.

The creation of links between the FDI's objective and the domestic companies target, internalizing the beneficial effects of the multinational activities and their potentiating by encouraging the type of FDI favorable to the host economy (usually, the one through

mergers, acquisitions and joint ventures) depend on the state of technological and innovative development of the local industry and its absorption capacity as well.

The empirical research also indicates that the firms that have more advanced technology and a significant amount of expenditure on R & D benefit more from the presence of foreign companies.

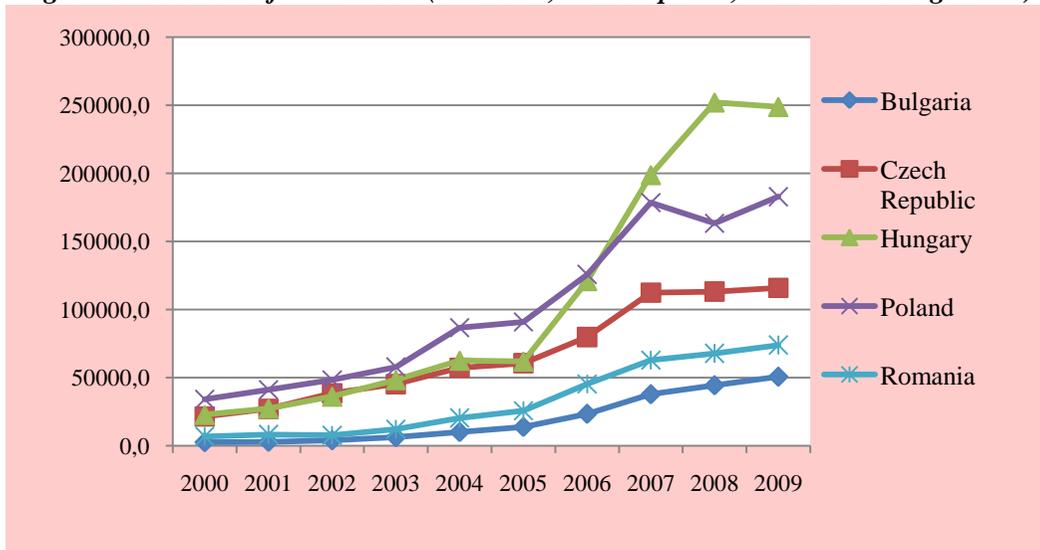
3.Opinions about FDI effects in Romania

A report published in the spring of 2008 (10)⁴⁸ on the countries from the Central and Eastern Europe presents a number of conclusions on the impact of FDI on the innovativeness of the Romanian industry, noting not only the positive effects but also the vulnerabilities. ‘Like other post-communist countries, in Romania the rate of promotion of the innovation at the level of the local industry is discontinuous and unsustainable, and the innovation activity is low except the one from the FDI. The growing dependence of the economies recipient of direct investment from multinationals in the acquisition and exploitation of new ideas and technologies is a source of vulnerability for the economies of the analyzed region’.

Despite the large opportunities for FDI externalities, the expected positive impact on the efficiency of the factors stimulating the innovation has been very limited in the case of the less developed EU countries such as Romania and Bulgaria. The low innovativeness performance also means a low level of the real externalities of FDI on local firms’ innovativeness.

⁴⁸ The report is based on a survey on 370 respondents, managers of companies or divisions working in 19 different industries and with significant presence in their respective sectors, with a turnover generally between 10 and 100 million dollars per year. Applying an assessment model of innovation its EIS, and they took another 20 in-depth interviews with executives, consultants and other experts in the field and they held an intensive office research program.

Fig.nr 1. The trend of FDI stocks (mil. USD, current prices, current exchange rates)

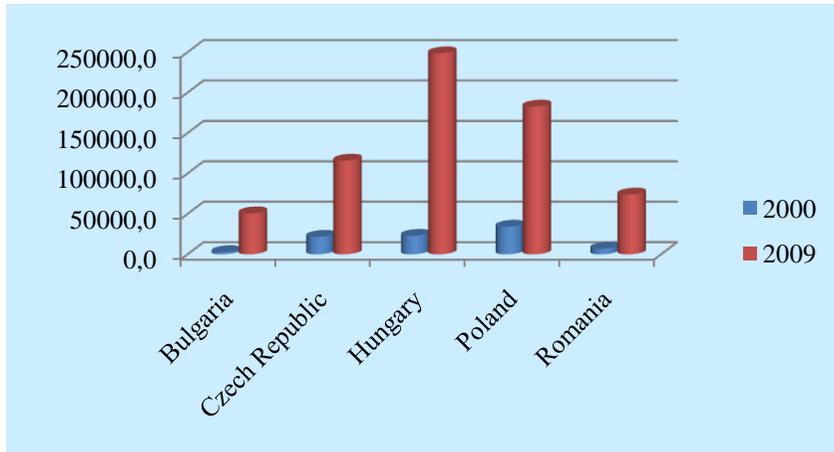


Source: UNCTADSTAT (unctadstat.unctad.org)

With few recent exceptions, many multinational companies do not opt for partial relocation of some of the R&D units and innovation at the level of the subsidiaries in Romania, or for their placement in areas particularly to facilitate the transfer of knowledge and technology to the local industry.

Although the sector that has the largest share of FDI stock is the manufacturing industry (30.5% in the year 2008 according to data offered by the Central Bank), followed by the financial and insurance intermediation sector (24.5%), the major injection with foreign capital goes towards the industries less intensive in high technology and with a low value-added. In the IT industry, the percentage ranged around only 5-6% of total attracted FDI in manufacturing. In medium or high technology sectors, the FDI under the form of greenfield investments is predominant, which diminishes the chances of knowledge and technology transfer in the upstream or the same sector.

Fig.2 FDI stocks (mil. USD, current prices, current exchange rates), by 2000 and 2009



Source: UNCTADSTAT (unctadstat.unctad.org)

The competition between the local firms and the multinationals on the high-skilled labor market and with potential for innovation is very intense. The local firms also face the brain drain to other EU countries. The fact that Romania is a pool of talented human capital favorite in the Central and Western European companies, does not solve the problem of brain drain, it only relocates it by increasing the competition in the local market. A higher local demand for highly skilled labor may increase its cost and lower in the future, the foreign interest for local investment

We can mention also the fact that since the beginning of 2007, the access to public funds for R & D& I is open to foreign participation as well. Also, the appropriate tools to encourage foreign investors to integrate themselves into technology clusters and research-development platforms in order to facilitate the transfer of knowledge, technology and new management and technical skills have not yet been distinguished.

Conclusions

Maximizing the benefits that may arise from the presence of FDI in other countries, especially those with technological gaps from the mother company can only occur by taking into consideration of all types of potential, positive and negative effects, which may arise and the conditions for their generation.

The theory and experience of many countries has revealed the prevalence of positive multiplier effects when there are favorable conditions in the host country as far as the labor quality is concerned, the innovativeness of the firms and their capacity of absorption as well.

The political initiative, the most important and urgently needed to attract FDI with high potential for positive externalities should consider creating effective tools for ensuring the conditions necessary for firms to internalize these externalities. The multinational companies will invest in high tech sectors, which have a greater potential for positive externalities if they find strong complementarities strongly consolidated. Setting connections with the multinational companies, internalizing the spillover effects associated with their activities depend on the local absorption capacity.

For FDI to contribute effectively to economic growth in the host countries, a rethinking of the way to harmonize the policies on FDI in the industrial, research and development, innovation and education field is needed. At present, the degree of correlation is low and poorly integrated.

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EVALUATING THE EFFICIENCY OF LOCAL ECONOMIC DEVELOPMENT POLICIES

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This paper studies the way public authorities can fundament and evaluate the local economic development policies they want to promote, according to their efficiency. After presenting the relevant literature overview regarding the local economic development and its policies, we try to underline the importance of evaluating and prioritizing the local development policies and also to propose an efficiency-based model that we later use in building and evaluating local development policies scenarios. The research methodology is both descriptive, while presenting the theoretical framework, and empirical, while building scenarios and evaluating local policies. The obtained results show us that the local policy we tested is efficient, enabling new investments to bring bigger financial benefits than the cost needed to attract them.

Keywords: local development, policies, measuring, efficiency.

JEL classification codes: O21, O22

I. Introduction

One of the main challenges facing the European Union in the last years is the development disparities between Member States and also between its regions. EU's regional policy aims to reduce these differences by directing financial resources to less developed areas through the European Regional Development Fund, European Social Fund and Cohesion Fund.

However, to eliminate disparities in development between EU regions at all existing levels, a sustained effort is required by national and local public authorities to promote and support economic and social development.

Given limited resources, on one hand, and multiple and diverse development needs, on the other hand, and competition between public authorities in attracting investors, it is imperative for those public authorities to substantiate, monitor, evaluate and prioritize their local development policies. This paper proposes the use of theory in critical point in achieving the above.

The objectives of the scientific research in this paper refers to the stage presentation of previous research related to local development and local development policies, emphasizing the importance of grounding and prioritizing local development policies, presenting a model for the assessment of these policies and, finally, to test this model and presentation of research results.

II. Literature overview regarding local economic development

The literature in the field contains many and various approaches and definitions of the concept of local economic development. In the view of most economists, development

refers to stimulating local economic activity, boosting investment, helping to reduce unemployment and improving living standards (Matei and Anghelescu 2009: 14) in a certain area or a particular community.

According to the paper "Local Economic Development. Quick Reference" prepared by the Urban Development Unit of the World Bank in 2006, local economic development is the process in which public, private and non-governmental organizations work together to improve conditions for economic growth and employability of the workforce. Analysing the presentation of the same World Bank study and the historical evolution of local economic development, we see a move of the centre of gravity in the three analyzed periods (60s - 80s, 80s - mid 90s, late '90 - present) from the exclusive action of the state, towards acts of state and public-private partners and diversification of these actions.

On the same note, Canzanelli and Dichter (2001: 12-13) observed a change in local economic development perspective in terms of participation (from trying to reach a consensus, to participatory decision making), goals (from the increase rate of employment to improving the quality of life), policies (from policies oriented to domestic firms and SMEs to development policies of the local economy), tools (from specialized services and specific help for SMEs, developing industrial parks, use of local human resources to more integrated and more complex actions, such as development projects), social inclusion (from the lack of its promotion to promoting it locally in view of existing needs) and sustainability (from financial and managerial dependence to public sector to sharing revenues, responsibility and power).

The purpose of local economic development, according to World Bank, is strengthening the economic capacity of the administrative-territorial units to improve the economic future and quality of life for all residents.

In terms of local economic development objectives, Parlagi (2000, in Matei, Anghelescu and Savulescu 2009: 12) believes that they are represented by economic prosperity and social welfare by creating a favorable business environment, with the integration of vulnerable groups in the community, the use of endogenous resources and private sector development.

A key role in local economic development is held by strategic planning with regard to the specific area (Matei and Anghelescu 2009: 28). This refers to establishing a local development strategy, of the connected development policies and the needed activities or instruments to implement these policies.

Based on existing scientific work up to that point, Neiman and Fernandez (1999: 322-327) group and prioritize local economic development policies, as follows: institutional reform policy (facilitating the establishment of companies, representing business environment, public-private partnership, business networking, providing a solid legal framework for development), classic development policies (increasing business through assigning larger territory for business, allocation of land for commercial businesses, developing public infrastructure to boost business), indirect subsidies (exemption from payment of development fees, subsidized infrastructure costs, allocated business grants, tax breaks) and direct subsidies (grants for staff training, discounts on utilities costs, lower taxes, creating industrial parks, loans for businesses).

In a less structured form, the World Bank lists among local economic development policies stimulating local business growth, collaboration between communities, human resource development, sustaining the increase of life quality, facilitating the formation of clusters,

bringing local and regional development programs. We can observe the key role of the collaboration between the public sector private sector and civil society in ensuring local economic development, which makes us conclude that this cooperation is itself a main factor.

Formulation and implementation of local policies must take into account factors such as infrastructure (roads, public utilities, transportation, telecommunications, tourism infrastructure), buildings and land available (free land for the location of economic activities, available buildings, business centers), resources human resources (skilled labor, training), financial support (local, regional, national, European), support and dissemination of knowledge management (advisory services, dissemination of information), the living environment (quality of service natural environment, criminal status) and organizational capacity (organizational structures, economic cooperation, private sector involvement) (Roscovan 2003: 17). They provide the ability to develop a SWOT analysis on the relevant administrative-territorial unit on which to build strategies, policies and activities needed to ensure local economic development.

The criteria for evaluating local development policies may consider the relevance, effectiveness, efficiency and utility or durability (Matei, Angheliescu and Savulescu 2009: 33-36). The relevance shows the connection between the objectives and the needs, the effectiveness shows the quality and quantity of the achievement of objectives formulated through appropriate solutions, the efficiency compares the costs associated with the proposed policies with results, and the usefulness shows in which extent the policies implemented meet the needs. Through the present paper we propose a model for evaluating the local public development policies which analyzes their efficiency, comparing the financial benefits brought by a new investment with the necessary funds for attracting it.

III. Measuring the efficiency of local development policies

To fundament, measure and evaluate the effectiveness of economic development policies supported by local government we resorted to constructing an index (I_e) which compares the revenue from a new investment with expenses needed to attract such an investment, meaning the facilities that are granted. For a local policy to be effective, the index must have a value over 1. Financial income to the local budget is composed of tax on buildings (I_{cl}), land tax (I_{teren}), income from selling or leasing land (V_{teren}) and shares deducted from the tax rates on income (CD_{IVG}) in percentage of 47%. Facilities granted by the local authority to new investors refer to economic incentives (F_{ec}) which consists of the opportunity cost of sale, the land concession, tax incentives ($F_{fiscale}$) which consists of tax reductions and exemptions from tax on building and land and also facilities regarding public utilities (F_{up}), the local authority committing in some cases to ensure the necessary utilities.

Therefore,

$$I_e = \frac{I_{cl} + I_{teren} + V_{teren} + CD_{IVG}}{F_{ec} + F_{fiscale} + F_{up}}, \text{ and}$$

$$I_{cl} = \sum_{i=1}^n \frac{(c_{im} + k_{Mj}(i-1)) \times B_i(V_i)}{(1+r_a)^i}, \text{ where } n=\text{duration of use, } c_{im}=\text{tax share, } k_{Mj}=\text{tax rate increase, } B_i(V_i)=\text{taxing base/investment value, } r_a=\text{discount rate}=5,5\%$$

$$I_{teren} = \sum_{i=1}^n \frac{S_t \times I_t [lei / ha / zonă] \times (1 + k_{Mj}(i-1))}{(1 + r_a)^i}, \text{ where } S_t = \text{land size, } I_t = \text{set tax}$$

$$V_{teren} = S_t \times V_t, \text{ where } V_t = \text{trading value}$$

$$CD_{IVG} = \sum_{i=1}^n \frac{\overline{N}_s \times \overline{S}_m \times c_{IV} \times 47\% \times 12}{(1 + r_a)^i}, \text{ where } \overline{N}_s = \text{average employees no.}, \overline{S}_m =$$

average salary, c_{IV} = income tax rate = 16%

$$F_{ec} = S_t \times (V_p - V_t), \text{ where } V_p = \text{market value}$$

$$F_{fiscala} = p_{red}(\%) \sum_{i=1}^5 I_{cl_i} + I_{teren_i}, \text{ where } p_{red} = \text{reduction percentage } (\%)$$

$$F_{up} = \sum_{i=1}^{n_{up}} C_{u_{up}} \times U.M._{up}, \text{ where } n_{up} = \text{no. of utilities, } C_{u_{up}} = \text{unit cost of public utility,}$$

U.M._{up} = measuring unit for public utilities (kml)

IV. The research methodology and findings

Starting from the theoretical basis set above which is the result of descriptive research methodology, we continue with the empirical research. This refers to the use of efficiency method to substantiate the various simulations and evaluation of local development policies. For these simulations to be as real as possible, we analyzed existing policies of Oradea municipality based on "Rules of granting tax incentives on taxes on corporate buildings and land, in order to attract investment and support sustainable economic development" attached to the Council's Decision no. 407/2010.

Under this regulation, traders who start a business in Oradea with an investment value of over € 500,000 benefit from reductions in tax on buildings for a period of five years, the limit of the equivalent in lei of 200,000 euro, 100,000 euro for transport profile companies, as well as exemption from land tax payment for the period of validity of the construction permit. The share of total tax reduction is calculated by adding the tax reductions according to the following criterias: the investment value, investment value for SMEs established by young entrepreneurs, medium number of employees, location and profile of investment or profile. To evaluate this local development policy, we used the theory of critical points in the analysis of two facilities which benefit from minimum and maximum reductions from taxes from Oradea municipality.

The first simulation refers to a trading business with a investment project (construction of a building) in value (V_i) of EUR 500,000, respectively 2,000,000 lei, situated in an area tax C (S_t) of 1.5 ha and will employ 80 people (N_s). The land required is owned by Oradea municipality who is willing to lease it (V_t) starting from a price of 1 euro/sqm/year, while the market value (V_p) is 3 Euro/sqm/year, or starting to sell it at a price of 10 euro/sqm,

while the market value is 20 euro/sqm. Also, the municipality will ensure the provision of 0.1 kml water and wastewater utilities (500,000 euro/kml) road (one million euro/kml) and electricity (200,000 euro/kml).

The tax rate for buildings is 1.1% in Oradea and we assume that its annual growth and land tax will be 1% each year. We consider the normal use of the building for 10 years, and the discount rate of 5.5%. According to the Monthly Statistical Bulletin of Bihor, the average gross salary in January 2011 was 1,474 lei.

Given the characteristics of the investment, the trader will receive a share of the reduction on buildings tax of 30% (15% for investment amount, 5% for the number of employees, 5% for the fiscal area and 5% for the activity profile).

For this policy to be effective, the efficiency index at local level must be bigger than 1.

$$I_{cl} = \sum_{i=1}^{10} \frac{(1,1 + 0,01(i-1))\% \times 2.000.000}{(1 + 5,5\%)^i} = 171.948,93lei$$

$$I_{teren} = \sum_{i=1}^{10} \frac{1,5ha \times 3.832lei / ha / zonaC \times (1 + 0,01(i-1))}{(1 + 5,5\%)^i} = 45.085,50lei$$

$$V_{teren-concesiune} = 15.000mp \times 4lei / mp / an \times 10ani = 600.000lei$$

$$V_{teren-vanzare} = 15.000mp \times 40lei / mp = 600.000lei$$

$$CD_{IVG} = \sum_{i=1}^{10} \frac{80pers \times 1.474lei / luna \times 16\% \times 47\% \times 12luni}{(1 + 5,5\%)^i} = 802.086,30lei$$

$$F_{ec-concesiune} = 15.000lei / mp \times (12 - 4)lei / mp / an \times 10ani = 1.200.000lei$$

$$F_{ec-vanzare} = 15.000lei / mp \times (80 - 40)lei / mp = 600.000lei$$

$$F_{fiscale} = 30\% \sum_{i=1}^5 I_{cl_i} + I_{teren_i} = 30\% \times 95.563,03 + 5.448,34 = 28.668,91 + 5.448,34 = 34.117,25lei$$

$$F_{up} = (500.000 + 1.000.000 + 200.000)euro / kml \times 0,1kml = 170.000euro = 680.000lei$$

$$\Rightarrow I_{e-concesiune} = \frac{171.948,93 + 45.085,50 + 600.000 + 802.086,30}{1.200.000 + 34.117,25 + 680.000} = 0,85 < 1$$

$$\Rightarrow I_{e-vanzare} = \frac{171.948,93 + 45.085,50 + 600.000 + 802.086,30}{600.000 + 34.117,25 + 680.000} = 1,23 > 1$$

Given the resulted values of the efficiency index, it can be concluded that although the facilities considered are the minimum allowed, this policy is not effective if the land is leased at a rate so low. Sale of land, even if performed well below market price contributes to a useful development results. However, we propose a increase in land selling price, closer to the market price.

The second simulation refers to a production firm wishing to invest (construction of a building) in value (V_i) of 10.5 million euro, meaning 42,000,000 lei, located in tax area D and on a surface (S_t) of 1.5 ha and will employ 350 people (N_s). The remaining specifications remain the same as for the first simulation. Given the characteristics of the

investment, the trader will receive a reduction share of the tax on buildings of 85% (40% for the investment amount, 20% for the number of employees, 10% for the tax area and 15% for the profile of activity).

$$I_{cl} = \sum_{i=1}^{10} \frac{(1,1 + 0,01(i-1))\% \times 42.000.000}{(1 + 5,5\%)^i} = 3.610.927,57lei$$

$$I_{teren} = \sum_{i=1}^{10} \frac{1,5ha \times 1.821lei / ha / zonaD \times (1 + 0,01(i-1))}{(1 + 5,5\%)^i} = 21.425,02lei$$

$$V_{teren-concesiune} = 15.000mp \times 4lei / mp / an \times 10ani = 600.000lei$$

$$V_{teren-vanzare} = 15.000mp \times 40lei / mp = 600.000lei$$

$$CD_{IVG} = \sum_{i=1}^{10} \frac{350pers \times 1.474lei / luna \times 16\% \times 47\% \times 12luni}{(1 + 5,5\%)^i} = 3.509.127,84lei$$

$$F_{ec-concesiune} = 15.000lei / mp \times (12 - 4)lei / mp / an \times 10ani = 1.200.000lei$$

$$F_{ec-vanzare} = 15.000lei / mp \times (80 - 40)lei / mp = 600.000lei$$

$$F_{fiscale} = 85\% \sum_{i=1}^5 I_{cl_i} + I_{teren_i} = 85\% \times 2.006.823,67 + 2.589,10 = 1.708.389,22lei$$

$$F_{up} = (500.000 + 1.000.000 + 200.000)euro / kml \times 0,1kml = 170.000euro = 680.000lei$$

$$\Rightarrow I_{e-concesiune} = \frac{3.610.927,57 + 21.425,02 + 600.000 + 3.509.127,84}{1.200.000 + 1.708.389,22 + 680.000} = 2,16 > 1$$

$$\Rightarrow I_{e-vanzare} = \frac{3.610.927,57 + 21.425,02 + 600.000 + 3.509.127,84}{600.000 + 1.708.389,22 + 680.000} = 2,59 > 1$$

The results of the second simulations indicate that the policy to stimulate local economic development by providing incentives for investment in Oradea is very effective in the long term. According to the calculated indicator of efficiency, the benefits of a high-value and durable new investment are at least two times higher than the cost of facilities provided, even when the municipality bears the cost of equipping the facilities of the location.

V. Conclusions

This paper proposes the evaluation approach of local development policies in terms of their effectiveness through an analysis of costs and benefits of the local public authority. This is a scientific and financially accessible method, with immediate application in substantiating certain local policies. It can be the starting point of more complex analysis on the effectiveness of local development policies on economic and social level, and also on their relevance, effectiveness and utility.

The authors have proposed a model for assessment of local development policies that have proved effective through the policies of Oradea municipality of granting tax breaks, reasoned by attracting investment and supporting sustainable economic development.

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SPATIAL MODELING IN LOGISTICS DECISION-MAKING PROCESSES. IDENTIFYING THE OPTIMAL LOCATION FOR A SINGLE CENTRAL WAREHOUSE

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In the context of the EU single market formation it was observed a trend of giving up local deposits in favor of central regional warehouses. Another factor favoring centralization of storage is the economic crisis that has forced the need for efficient activity by making decisions on reducing costs. The first part of this paper focuses on literature review and presentation of the most important decision-making models developed in the field of logistics. Several models were selected and analyzed in detail to build a modern research methodology, based on precise mathematical calculations.

In the decision making process of selecting an optimal location for a central warehouse, we used a series of mathematical models to identify the exact geographical position, which induces minimal cost for transportation to consumption points.

In the second part of the paper, the article aims to identify the optimal location for a central warehouse in Romania.

In this methodology, we chose 100 cities in Romania, positioned throughout the country and characterized as input by three sizes: latitude, longitude and population size. Latitude and longitude were used for graphical representation of the space considered (Romania) by individual points (cities), and the population was used as approximation of the demand for generic products. We applied a mathematical model in order to calculate the gravitational center using an excel spreadsheet. Each step in applying the model is explained in detail in the paper. The results of the research indicate the optimal location (characterized by its latitude: 45.469408 N and longitude: 25.630817 E) for placing a central warehouse that can supply the 100 cities with minimal transportation costs. We also calculated the distances between the optimal location and the 100 cities and then identified 10 cities, the closest to our optimal location (Sinaia, Sacele, Brasov, Campina, Campulung, Ploiesti, Fagaras, Pitesti, Mierucurea-Ciuc, Odorheiu Secuiesc). Any of these cities can be chosen as location to build a central warehouse in Romania, because they represent a relatively good approximation for the gravitational center identified in the model applied.

Keywords: logistics, decision making process, optimal location, warehouse, spatial modeling

JEL Codes: C21, C23, R31

1. Introduction

At the microeconomic level, there are several categories of decisions to be taken for the development in terms of efficiency of economic activity of the company. These categories refer to:

- Choice of locations for production and distribution (storage)
- Establishment of production and inventory levels
- Selecting the way for transport, routes and shipment size

All these decisions can be taken on short, medium and long term. In general, decisions about production and storage location are taken for long term (5-10 years) and those related to transport routes and size expedition on a short time horizon. Every decision belongs to a specific market with its own supply and demand (the company's product market, transport market, the market for storage space) and the effects of decisions are interconnected. Models have been developed to deal with one of these categories of decisions, but complex and dynamic models attempt to provide a long-term interaction of each decision and the related markets.

2. Literature Review

The decision-making process regarding the way of transport has been incorporated into theoretical models, which can be classified by type of strategic decision to be taken, which may be concerning the supply, production, transportation or distribution.

2.1 Decisions related to sales and supply

The two functions of the firm, supply and sales have a spatial interaction: at the aggregate level this type of models are used to calculate the exchange of goods between regions. Depending on the assumptions of the decision process at individual level, there are two types of spatial models:

- Linear programming models (LP models), in which decision making is based on the determination of alternative relationships, this model is applicable to individual firms, but cannot be applied for predicting the behavior of a large number of carriers in the business of transport of generic goods (Harker, 1988);
- Gravitational models that assumed that decision-making occurs in random utility terms (random utility conditions); models derived from this class use behavioral principles related to profit maximization model for interpreting the decision variables (Linneman, 1966);

2.2 Models related to logistics and storage services (inventory models)

In order to ensure product availability according to demand conditions, a temporary storage is needed. Ensuring the optimal functioning of a production process or the supply with different types of products according with market demands is performed using storage models (Trandafir, 2004).

Using traditional storage models (conventional inventory model) provides an optimal inventory policy.

To find the optimal balance between stock size (which involves storage costs) and quantity of individual supply/delivery (involving transport costs) information on shipping is necessary, as well as the size and frequency. This way we can determine storage and related costs, in terms of actual costs and opportunity costs.

The inventory model is based on data regarding product logistic characteristics (amount, method of packing, size of shipments, volatility of demand). The necessary time for transport, and its security are essential variables in inventory models, so the choice of route and transport modality should be integrated into the model. In some models the choice of location and size of deposit is not a decision variable (Stada and Hauwert, 1992).

3. Research Methodology

The methodology used for the empirical research in this article is based on selected elements from different models listed below.

3.1 Modeling the decision regarding the mode of transport

The decision regarding the mode of transport used for delivery can be made either by the seller or the buyer, either by forwarding company, for the sender or recipient.

Regarding the reference delivery quantity for which a decision is made there are two different approaches. A first type are models that take into account delivery units at individual shipments level or total amount delivered over a certain period of time (classified according to product type and point of origin/destination). Decisions are taken in the context of minimizing the costs of storage and transportation, and the size and frequency of delivery are considered fixed in the model input (Di Gangi et al, 1994; Montella et al, 1994).

Another type of models is those with a logistic approach of choosing the mode for transport, which takes into account simultaneously the decision regarding the size and frequency of delivery. In general delivery unit of reference in this case is considered annual. Models of this type have been developed at MIT (Freight Transportation Group, 1980; Vieira, 1992).

Nuzzolo and Russo (1998) developed a logistic decision making model for choosing the mode for transport, which takes into account specific delivery units for different types of transport

3.2 Models for minimizing the aggregate transportation cost

This model is based on linear programming problems, which is based on certain hypotheses, including:

- We consider m supply centers (warehouses) and n points of consumption (stores)
- For simplicity, we consider a single product, which is found in the amount a_i at the warehouse i and the quantity b_j is required in the shop j, where:

$$1 \leq i \leq m \quad \text{si} \quad 1 \leq j \leq n$$

- The cost of transporting a unit of product from warehouse i to store j is c_{ij} , and it does not depend on the amount transported

The methodology for building the model is the following:

- X_{ij} denote the unknown quantity of product that will be transported from the warehouse i to the store j

- We express the required amount of product from the warehouse i to all the n stores:

$$a_i = x_{i1} + x_{i2} + \dots + x_{in} \quad (1)$$

- We express the quantity transported from all the m warehouses to store j:

$$b_j = x_{1j} + x_{2j} + \dots + x_{mj} = \text{quantity required at store j} \quad (2)$$

- The cost of transport for the whole amount of product is $c_{ij}x_{ij}$

Conditions: $x_{ij} \geq 0$, $1 \leq i \leq m$, $1 \leq j \leq n$

- Total cost of transport from all m deposits to all n consumption centers is:

$$\sum_{i=1}^m \sum_{j=1}^n c_{ij}x_{ij} \quad (1)$$

In order to realize the transport it is necessary that:
(equilibrium condition)

$$\sum_{i=1}^m a_i = \sum_{j=1}^n b_j \quad (2)$$

The system of equations (1) and (2) has an infinity of solutions, of which we are interested in those with the minimum cost of transport. In order to obtain it, we built a linear transport program:

$$\begin{aligned} \min \quad & \sum_{i=1}^m \sum_{j=1}^n c_{ij} x_{ij} \\ \sum_{j=1}^n x_{ij} &= a_i, \quad 1 \leq i \leq m \\ \sum_{i=1}^m x_{ij} &= b_j, \quad 1 \leq j \leq n, \quad x_{ij} \geq 0 \end{aligned}$$

Solving this linear transport problem is accomplished using specialized software that obtains the solution / solutions that lower the total cost of transport induced by the transport of goods from warehouses to points of sale. Similar models can be built to find solutions that minimize the cost of raw material supply for production centers. The model may be complicated by adding additional conditions (constraints), such as a minimum amount that can be ordered, or different price depending on the size of delivery.

3.3. Modeling decision on choosing the location for production and storage centers

The location of factories and warehouses is an essential problem in the firm's logistics strategy.

One way of constructing such a model is based on the transport problem, which starts from the assumption of fixed supply and consumption and the solution must minimize the cost of transportation between origin and destination points (Ballou, 1999).

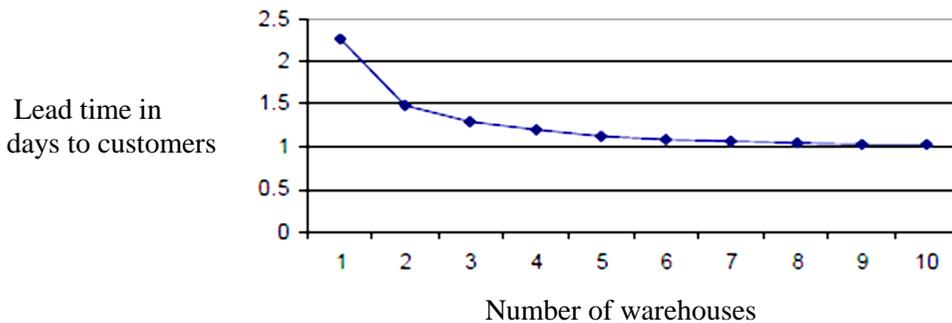
In order to build a simple gravity model we need a map with points of consumer demand (defined by latitude and longitude). The model will identify the optimal location solution for a central warehouse, with the lowest costs for transportation between the storage and consumption points.

Newest approaches performed a combination of cost minimization model and a gravitational model with double restriction. This model allows to set customer service level requirements (for example, imposing a maximum delivery time of 24 hours or less) as an additional restriction on the choice on optimal locations (Wilson, 2008).

The doubly constrained gravitational model uses a matrix that contains the centers of production and consumption. The matrix is used as basis to build a linear programming model that approximates the optimal flows between these locations.

Chicago Consulting (2003) applied such a model for the entire territory of the United States and identified the optimal location for a single central store in the city of Bloomington Indiana. The model took into account the possibility of adding additional storage (up to 10), each store added reducing transit time to customers.

Figure 3: The optimal locations for placement of deposits in U.S.



Sursa: Chicago Consulting, "The 10 Best Warehouse Networks 2003", <http://www.chicagoconsulting.com/10best.shtml2003>

We can observe in Figure 3 that as an extra storage is added to the model the delivery time (in days) decreases.

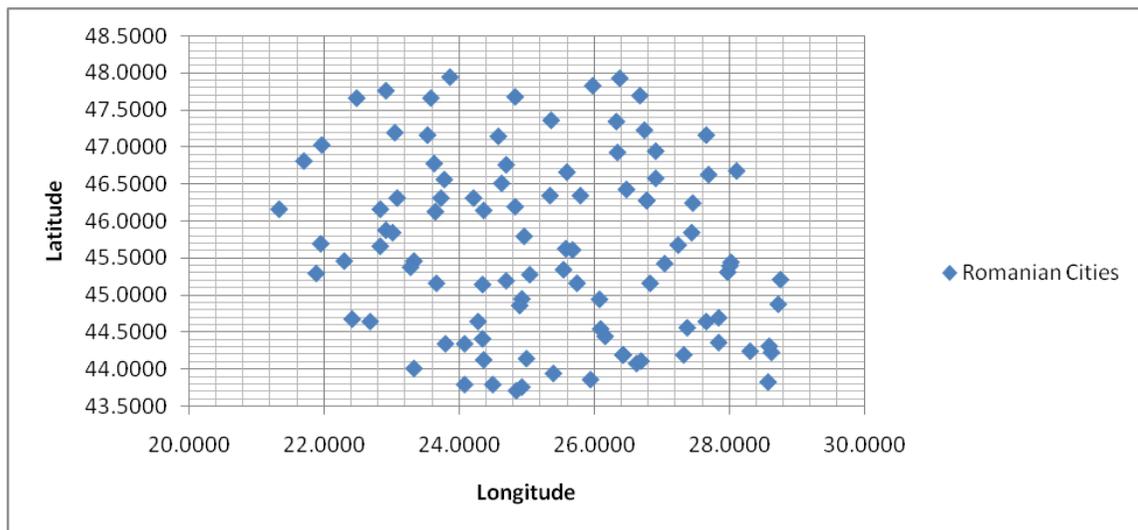
4. Case study: determining the optimal location for a central warehouse in Romania

In order to build a model for determining the optimal location for a central warehouse and apply it, we selected 100 towns in Romania and found their geographical position data by latitude and longitude coordinates. Based on a table in Excel with all the details, the geographical coordinates were transformed in decimal numbers using the excel formula:

TEXT (ROUND (LEFT (F5, 3) + (MID (F5, 5,2) + RIGHT (F5, 5) / 60) / 60.6), "00.000000")

So we created a new table with decimal numbers based on which we made a graph that illustrates all selected cities.

Figure 4: Spatial distribution of 100 selected cities in Romania



Source: by the author

To determine the geographic coordinates of the gravity center, we used the formula:

$$Lat_{cg} = \frac{\sum Lat_i * P_i}{\sum P_i} \quad Long_{cg} = \frac{\sum Long_i * P_i}{\sum P_i}$$

Lat_{cg} – latitude of the optimal gravitational point

Long_{cg} – longitude of the optimal gravitational point

P_i – population of the city i

To exemplify, we present a sample of the excel table used, representing the top 5 cities listed in alphabetical order.

Table 1:

City	Longitude	Latitude	Population
Abrud	23.0833	46.3167	6803
Aiud	23.7333	46.3167	28909
Alba-Iulia	23.6500	46.1333	66369
Alexandria	25.4000	43.9500	50591
Arad	21.3333	46.1667	172827

Source: realized by the author based on data available on www.wikipedia.com

The city's population was taken from the data made available according to the latest census in Romania.

After calculations, we have identified the point coordinates (lat 45.469408 N, 25.630817 E long), which represents the optimal location for placing a single central warehouse that provides lower costs for product distribution in the 100 selected cities from Romania.

Figure 5: Location of the gravity center (the optimal location for a central warehouse)



Source: Google Maps

5. Research results and conclusions

We can observe that the nearest villages are: Sinaia, Predeal, Brasov.

In order to determine the optimal location and distances of all other cities we used the following algorithm:

R = earth's radius (mean radius = 6,371km)

Δlat = $\text{lat}2 - \text{lat}1$ (latitude difference)

Δlong = $\text{long}2 - \text{long}1$ (longitude difference)

$a = \sin^2(\Delta\text{lat}/2) + \cos(\text{lat}1) \cdot \cos(\text{lat}2) \cdot \sin^2(\Delta\text{long}/2)$

$c = 2 \cdot \text{atan2}(\sqrt{a}, (\sqrt{1-a}))$, atan2 = excel function

$d = R \cdot c$, the distance between two points, first with a $\text{long}1$ and $\text{lat}1$ and the second with $\text{long}2$ and $\text{lat}2$.

We choose only the top 10 cities, the closest to the location for a single central warehouse.

City	Longitude	Latitude	Population	Estimated distance (km)
Sinaia	25.5500	45.3500	14636.0000	16.0248
Sacele	25.6833	45.6167	29967.0000	17.3756
Brasov	25.5833	45.6333	283901.0000	18.9675
Campina	25.7500	45.1667	38758.0000	36.1595
Campulung	25.0500	45.2833	38285.0000	67.7832
Ploiesti	26.0833	44.9500	232452.0000	76.5609
Fagaras	24.9667	45.8000	35759.0000	82.4518
Mioveni	24.9333	44.9555	35849.0000	96.2896
Miercurea-Ciuc	25.8000	46.3500	41852.0000	99.6575
Odorheiu Secuiesc	25.3500	46.3500	36948.0000	102.7237

Any of these cities can be chosen as location to build a central warehouse in Romania, because they represent a relatively good approximation for the gravitational center identified in the model applied.

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THE ROLE OF THE PREVENTIVE MEDICINE IN SUSTAINABLE DEVELOPMENT. A STUDY CASE ON THE PRIVATE MEDICINE SECTOR IN ORADEA

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The concerns with respect to healthy life styles, preventive medical approaches, safe environment, and early warning systems represents the Millennium Development Goals, the United Nations Organization's so called Decade for "Education for Sustainable Development", the European Union's sustainability strategy, the Global Environmental Outlook of the United Nations Environment Programme (UNEP) and the ten Principles of the UN Global Compact, all aiming to attain the sustainable global health, which is possible only through collective multilevel efforts for the sake of human wellbeing, equity, livelihood, and worldwide sustainable development and stability.

Romania, as an EU Member States, have to take into consideration the fact that health is a precondition for economic growth and sustainable development, and this way, it has to promote the EU common approaches to health policy. Between these approaches, the prevention plays a key role when addressing to the global health challenges such as the pandemics' control, and the rising tide of non-communicable diseases. For these purposes, preventive strategies need to include promoting policies that foster a healthy environment, healthy life styles and equitable access to health care and information, so, it is necessary to meet the requests towards sustainable global health.

From this perspective, for the empirical research pursued in this paper, we have considered the Global Challenge Index, which focuses on seven global challenges of the new millennium, and on this basis, we have compared Romania with the other EU Member States. Then, we have computed the index for Oradea and its neighbour region, including the framework of a comprehensive analysis of political, economic and social target system.

The key issues we have considered in this context were referring to lifestyles, life care and education for lifelong well-being, partnerships for health, institutions and related policy areas, alternative intercultural preventative medical approaches, and the good governance, policy relevance, and corporate social responsibility, and were analyzed mainly referring to the potential of the Romanian private medicine sector in preventive medicine.

The conclusions of the paper reveal the fact that the region of Oradea is much above the average index of Romania when it comes to preventive medicine, but still behind the other EU Member States. So, the background for meeting the precondition for economic growth and sustainable development in Oradea was created, but there are still a lots to be done on

short term, even because of the features of this area, which situates it at the top of the cancer diseases registered cases in the country.

Key words: sustainable development, preventive medicine, Romanian health care system, private medicine sector, Oradea – Bihor County

JEL Codes: H11, H51, I11, I15, I18

THE PRODUCTION OF MEDICINES IN ROMANIA AFTER 1990. WHAT'S THE REASON FOR IMPORTS?

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Since 1990, Romania turned itself slowly but surely, from a large drugs producer, which has used to supply drugs to the whole former Council for Mutual Economic Assistance Member States, and with a net positive trade balance in medicine sector, into a large drugs importer, trying hardly to attract investors which could produce medicines not only for the Romanian domestic market, but also for all other Eastern European markets, Ukraine, Russia and Turkey.

This paper focuses on the empirical analysis of the medicines production sector in Romania after 1990, aiming to emphasise the factors which have mostly affected this industry, in correlation with different interests and reasons which determined the increasing imports of drugs during the last years, by underlying at the same time, the role of the new public authority in charge of supervising the distribution and import of medicines in Romania, The National Medicines Administration (NMA).

The paper relevance relies in the fact that Romania registered during the last years drug imports of an average of 1.7 billion euros, while the drug exports were only around 0,1 billions euros, according to the computations made on the data provided by the Romanian Institute of National Statistics (INS). The most imported products are patent drugs, which are more expensive than those produced by the domestic manufacturer. At the same time, Romania registered an increase of the pharmaceutical market of around 20% only since its EU integration, this market proven to be largely driven by expensive products.

Our research conducted to the conclusion that the Romanian resort authorities have to immediately adopt measures meant to limit consumption of expensive drugs, on the one side, and to reinforce the domestic manufacturers on the other side, even by attracting major investors in this sector. We have also identified that there is a large competitiveness for Romanian medicine products on the international market, due to its production costs (Romania still is a low cost economy in this sector), as well as due to its tradition.

Key words: drug manufacture, medicine production, Romanian economy, FDI, exports and imports

JEL Codes: F14, I12, L52, L65

**SUB-SECTION: THE IMPACT OF FOREIGN LANGUAGES ON
THE BUSINESS ENVIRONMENT**

IS TRANSLATING E-COMMERCE WEBSITES AN EASY TASK?

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Teaching the terminology of various fields has been for a long time the privilege of the translation schools. Specialized translation is subject to certain lexical constraints: collocations, idioms and expressions specific to the respective field. A term gets a real meaning, only if it is linked to other terms specific to the field, with whom it establishes logical connections. Therefore, the translation of e-commerce sites can help customers to better understand the description of products and their features. It is recommended that the translations be made by a native speaker of the language that the online company wants the e-commerce website converted.

Keywords: e-commerce, website, specialized translation, conceptual equivalence, translators.

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1. Being more than a simple linguistic instrument, the terminology of e-commerce websites is an essential vector that transfers technical and scientific knowledge. Teaching various terminologies has been for a long time the privilege of the translation schools. Nowadays, on the one hand, it is a part of the technical wording and a part of the teaching/learning specialized languages, on the other hand. Teaching/learning terminology means “to look for the characteristics and qualities of the technical and scientific communications” (Humbley 2008 : 261-265).

Translating e-commerce websites means knowing e-commerce terms that occur in our native language or other languages. Obviously, the position of terminology in learning how to translate the websites, cannot limit to the learning of word lists. Furthermore, translation requires an exquisite interpretation of the text meaning and the terms in context; this interpretation cannot be made without thorough knowledge concerning the e-commerce field. A term gets a real meaning only if it is linked to other terms specific to the field, with whom it establishes logical connections.

If the term integrates in a field, it becomes part of the discourse. Thus, the specialized translation will be subject to certain lexical constraints: collocations, idioms and expressions specific to the respective field. Teaching/learning the translated terminology is achieved both at a conceptual level (by knowing the field) and a functional level (by knowing the specialized discourse). Slodzian outlines the necessity to replace the term into discourse:

“We take into consideration that terminology, from the translation perspective, leads to the emphasis on the notion of syntagmatic terminology, consisting of terms which are very active in discourse. Additionally, the connections between term and text are put in the foreground” (Slodzian 2000: 61-85).

As an essential vector of knowledge, terminology integrates naturally in the technical and scientific wording, being an element that ensures the quality of language and communication. In this way, “relying on a terminologic background, one can ensure not

only coherence of all the texts, but also coherence of the text subject to translation” (Humbley 2008: 261-265). As we have already seen, terminology plays an important role when a certain language wants to distinguish itself as a technical and scientific language. The society’s technological development has had a great impact on various terminologies. Likewise, it has changed the proportion between the literal translations and the specialized ones; Lately, the latter ones have been very demanded. This fact should lead to a thorough analysis in order to meet the theoretical and practical needs of the technical translations. So, it is highly important for us to get familiar with the websites’ terminology, to study the key problems concerning the websites’ translation and to achieve our main goal (conceptual equivalence in the translation process).

2. The main goals of an online company is to attract other foreign customers. In order to achieve this goal, its customers have to receive and understand the company’s online messages. Additionally, the content of e-commerce websites should be translated in other languages, in order to build trust with local customers.

The Internet World Stats reported that in 2010 the English language was the top language on the Internet with 536.6 million users with Chinese following closely at 444.9, then Spanish 153.3, Japanese 99.1, Portuguese 82.5, German 75.2, Arabic 65.4, French 59.8, Russia 59.7 and Korean 39.4 (see <http://www.suite101.com/content/e-commerce-language-conversion-software-vs-hiring-translators-a301443>).

“If I am selling to you, I speak your language. If I am buying from you, dann müssen Sie Deutsch sprechen.” is a relevant quote belonging to German Chancellor Willy Brandt. Briefly, he points out the fact that businesses tend to communicate with vendors in their native language, so why would their customers not expect the same treatment? According to Forrester Research more than one-third of all internet users are non-native English speakers and visitors stay for twice as long if the website is in their own language. Therefore, we would like to add that translation of e-commerce sites can help customers in order to better understand the description of products, their features (see <http://www.suite101.com/content/e-commerce-language-conversion-software-vs-hiring-translators-a301443>). Also, this aspect can lead to an increase of orders and sales, ensuring that essential information such as order-tracking, contact numbers and transaction details are given in the customer's native language.

3. Language Conversion Software or Hiring Translators to translate the e-commerce websites?

Firstly, we would like to mention that *translating* a website is different from *localizing* the language. When we translate a website without localizing it, we convert only the language and this language can contain sentences with inappropriate words and terminological units that are not commonly used.

Nowadays online businesses can benefit from three types of *language conversion software*: software programs installed onto their server, software to convert the language and then paste the results onto the website and third-party hosted software which automatically translates the website for the user.

Regarding the second one, the one that we brought into discussion is quite inexpensive and has a quick integration. In spite of having a quick integration, there are several drawbacks: language is not localized, expressions and words used incorrectly, confusing translations

(see <http://www.suite101.com/content/e-commerce-language-conversion-software-vs-hiring-translators-a301443>).

Secondly, localization is the process of converting the content and the design of a website in a form that is specific to the foreign market both linguistically and culturally. This way, the e-commerce site makes a good impression and generates revenues.

When we use *language conversion software*, we help customers navigate the site and understand what the online business is trying to tell us. *Translators* can make the e-commerce site appear as if the business was completely focused on the foreign country and more international customers become interested in the online products.

In comparison to *language conversion software*, *translators'* work is easy for customers to understand, builds trust with international customers and locates within a country, being in a permanent contact with local residents. Among the drawbacks regarding the hiring of translators, we mention that this service is more expensive and time consuming. In order to avoid blunders and awkward translations, we consider that hiring translators to translate e-commerce websites is the best choice. Furthermore, it is recommended that the translations be made by a *native speaker* of the language that the online company wants the e-commerce website converted. To put it in a nutshell, just these *translators* are good at using idioms, expressions and sayings that are common to native speakers.

4. Translating the content of e-commerce websites

We have previously mentioned that *translators* are the *native speakers* of the target language, but they should also know specific terms of the e-commerce terminology. If they make use of a data base (thus ensuring accuracy), *translators* check the text from the cultural point of view, taking into account the subtleness of each language, so as to keep the message of the text. Sometimes it is extremely hard to translate from English into another language. Armando Roggio mirrors this aspect in his article entitled *Ecommerce Know-How: Translate your Ecommerce Site*. Furthermore, he mentions that if we wanted to translate the idiom "don't judge a book by its cover" into French, it would more convenient to say, *l'habit na fait pas le moine*, (the clothes don't make the monk) than *ne juge pas un livre par sa couverture*, which is the literal translation. The French idiom, *l'habit na fait pas le moine* has the equivalent meaning to the English idiom, even though the actual words are nothing alike. This idiom is used in English to say that things are not always what they seem, or that sometimes what is inside of a thing is greater than what is on its surface (see <http://www.practicalecommerce.com/articles/1241-Ecommerce-Know-How-Translate-Your-Ecommerce-Site>).

Taking into consideration this article, we admitted that we are able to find equivalents, as long as we understand the languages involved in the translation process. Sometimes the content of an e-commerce site consists in too long sentences and *translators* are forced to cut the sentences and to rewrite short sentences in order to convey the message of the texts.

We selected some texts from the content of three websites – *online companies selling beauty products, furniture and watches*. If we want to translate into Romanian the texts, our activity will be marked by the following aspects:

a. *Mancine's body butter is formulated by **whipping** botanical extracts together with shea butter to create a perfect, emollient-rich body butter. It is great to re-hydrate and nourish the skin. It can be used daily all over body concentrating on extra dry areas, particularly on the hands, feet, knees and elbows.*

We started to translate the text in *a.*, but we realized that it is better for us to rewrite the text in English, then translate in order to transmit a clear and concise message to the customers, not forgetting two important components: to recommend the product and to urge customers to buy it. Here is the reduced text that could be translated into Romanian:

Mancine's body butter is an emollient-rich body butter which contains botanical extracts together with shea butter. Use it daily to re-hydrate and nourish the skin, especially dry areas: hands, feet, knees and elbows.

b. This coconut and vanilla blend will leave your skin smelling **scent-sational!**

c. OPI latest gift pack is an on-the-go manicure kit. Pampering has never looked so gorgeous with two pretty pink nail lacquers and adorable FREE nail file and tweezers.

Bring the salon touch to your fingertips!

d. We do offer a **layaway program** with no penalties for cancellation. Please contact us below for more details.

e. Algologie Moisturising Cooling Cream- Gel. Suits dry skin, with oily areas. Good for hot climates. A cream-gel, with fresh and non oily texture, acts in three ways to moisturise and brighten **thirsty skin**.

Concerning b., c., d., e., the literal translation of the words and phrases in bold would lead to an awkward translation. To convey the intended meaning, we should look for synonyms and should adapt to the Romanian language. Of course, knowing legal terms is a plus (see d.).

f. Delivery was fast and customer service is **top notch**. We will be shopping with you more. Thank you.

g. Our delivery times vary. A good **rule of thumb** is to allow 4-6 weeks of delivery.

As our goal is to reach the lowest level of reader, we must not translate literally the bold phrases in *f.* and *g.* because we do not convey the intended meaning. We need to provide an easy-to-read content and not a confusing translation. Last, but not least, we communicate the intended meaning of the phrases, in essence, we do not translate the actual English words. Also, we could make a list of English business idioms and find their Romanian equivalent so as to make our translation activity much easier.

Another example is the product description below:

h. Citizen Exceed Solar Radio Women's Watch # EBD75-2721. Dial: **Shell white butterfly**. Band: Stainless Steel. Case: Stainless steel. Glass: spherical sapphire glass (**non-reflective coating**). Clasp: **fold over clasp** with push button. Caliber: H336. Driving period: Full-charge time about 1.5 years. Accuracy: ± 15 seconds/month (non-receiving).

We need to translate it in a descriptive way, to ensure customers' understanding. But, first of all, we should know the specific language used in this description: **shell white butterfly, non-reflective coating, fold over clasp**. By using specialized dictionary, we translate the product description in due time and identify interdisciplinary terms.

5. Conclusions

The World Wide Web plays an important role in our daily life. As consumers, we can meet our needs by placing online orders. That is why, online companies should present its profile and services properly, in order to meet the customers' needs and understanding globally.

The visitors of a website are ready to order and purchase products, especially when the content of the website is presented in their native language. Therefore, translators become

the most import key, because they translate not only the words and sentences on the website, but also the general tone and the key messages, adapting each cultural reference.

We focused on the translators' task and we presented some techniques regarding the translation process. The best translators are the ones which are native speakers of the target language. Good written English language can be very difficult to translate in Romanian. To exemplify, we selected texts from three websites and we concentrated on the words, expressions, idioms that pose problems to their translation into Romanian.

Eventually, we reached the conclusion that translators-native speakers are more reliable than language conversion software. In comparison with the language conversion software, translators create a text that is accurate, appropriate for the potential customers and consistent with the corporate image of the online company.

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A-T-ON VRAIMENT BESOIN DE LANGUES ÉTRANGÈRES DANS LE TOURISME ROUMAIN? PROPOS SUR LA LÉGITIMITÉ DES COMPÉTENCES MULTILINGUES

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Situées dans une zone de confluence entre la philologie et l'économie, les langues étrangères pour les affaires représentent un domaine de plus en plus intéressant pour les responsables économiques européens conscients de la valeur générée par les compétences multilingues. Le présent article se propose d'offrir une lecture du document Master Plan pour le développement du Tourisme National de la Roumanie 2007-2026 en clé linguistique applicative, dans la tentative de synthétiser le rôle attribué aux langues étrangères dans la stratégie nationale de développement du tourisme. L'ample étude réalisée par le ministère roumain, remarquablement conseillé par l'Organisation Mondiale du Tourisme, offre une image réaliste du tourisme roumain au moment de l'intégration dans l'UE et en prévoit l'évolution sur une période de 20 ans. Les recommandations du Forum des Entreprises sur le Multilinguisme et les conclusions de l'étude ELAN mettent en évidence l'impact des langues étrangères sur le milieu des affaires, la relation directe entre la compétence linguistique, la performance, le profit et le développement. La méthodologie de recherche utilisée a supposé l'identification des unités de logement (hôtels et pensions) d'Oradea, la ville municipale du département de Bihor et Băile Felix, renommée station balnéaire située à environ 10 km d'Oradea (les deux situées dans la région frontalière avec la Hongrie) et l'analyse des sites internet correspondants. Leurs présentations virtuelles sont réalisées en général en roumain, mais nous constatons une préoccupation réservée pour la présentation virtuelle multilingue; notre but est de résumer, dans la perspective orientée vers le tourisme international, le paysage linguistique créé dans cet espace en ligne. Nous constatons, suite à cette recherche, que les langues étrangères sont presque unanimement ignorées, malgré leurs valences de profitabilité incontestables, par les officiels et par les propriétaires d'hôtels et de pensions de la région de Bihor qui ne choisissent pas d'appliquer une stratégie multilingue pour la promotion. Les langues utilisées prioritairement sont le roumain et l'anglais, suivies, à distance, par l'allemand, l'italien et le français. L'originalité de l'épreuve est donnée par la mise en relation du tableau linguistique de la promotion touristique locale (zone frontalière Bihor) avec la vision du document cadre. Les données offertes permettent des conclusions théoriques et des solutions pratiques, applicables à plusieurs langues et dans plusieurs régions touristiques du pays. Elles compléteront aussi l'argumentation en faveur du multilinguisme, dans le cadre d'une étude doctorale, menée à l'Université de Reims, France, avec la collaboration d'une équipe préoccupée par la gestion multilingue de l'information, sous la coordination des professeurs J.E. Tyvaert E. Castagne.

Keywords: langues étrangères spécialisées, tourisme international, multilinguisme, présentation virtuelle, Bihor

Cod JEL: Y8

1. Introduction

Le point de départ de notre étude est représenté par l'une des conclusions du Rapport Davignon relatif à l'impact des langues étrangères sur le milieu économique «L'Europe court le risque de perdre la guerre des compétences, alors que les économies émergentes, principalement en Asie et en Amérique latine, acquièrent rapidement les compétences linguistiques et autres nécessaires pour dépasser leurs concurrents sur les marchés de demain» (Rapport Davignon 2008: 8).

En extrapolant une observation d'Odile Challe, on constate que dans le domaine du tourisme international «les problèmes de communication linguistiques sont négligés parce que considérés comme secondaires» (Challe 2002: 130). Après l'adhésion de la Roumanie à l'UE, les officiels ont posé sérieusement le problème de l'élaboration d'un Master Plan du développement du tourisme national, dans la perspective d'une approche durable du développement de ce secteur extrêmement offrant. Réalisé en collaboration avec l'Organisation Mondiale du Tourisme, ce document est une ombrelle qui couvre une longue période, comprise entre 2007 et 2026. La vision générale ne reste pas dans un périmètre restreint, local et national, mais elle se rapporte à une dimension internationale, dans le sens de l'atteinte des standards européens et de l'ambition de développement dans un rythme supérieur à d'autres destinations touristiques de l'Europe (Master Plan 2007: 163), ce qui transforme les langues étrangères dans un facteur incontournable dans le domaine du tourisme.

2. Visiteurs étrangers et leur rôle dans l'élaboration des objectifs cible du tourisme en Roumanie

Les responsables du plan stratégique pour le tourisme estiment que dans la conception des objectifs cible du tourisme roumain, le paramètre *visiteurs étrangers* représente une importante ressource qui ne peut pas être détachée de la langue qu'ils parlent. Si nous acceptons l'affirmation de Mesplier et Bloc-Duraffour, conformément à laquelle le tourisme est «un phénomène sélectif, à l'origine des modifications profondes de l'environnement et de l'organisation régionale», nous nous demandons s'il est possible «de maîtriser un phénomène aussi puissant» (Mesplier et Bloc-Duraffour 1997: 14). A-t-on vraiment la chance de gérer avec succès les croissances estimées à long terme dans le cadre du tourisme international en Roumanie? Hésitons-nous encore à mettre en œuvre les importantes actions de communication et de commercialisation? (Patin 1997: 60)

2.1 Objectifs prévisionnels concernant le nombre de visiteurs étrangers dans la période 2006 - 2026

L'augmentation du nombre de touristes européens sera spectaculaire, passant de 2,8 millions (en 2006) à plus de 8,5 millions en 2026 ; les touristes de l'Europe non UE monteraient de 2,8 millions à 5,3 millions. Très loin se situent dans les estimations les touristes de l'Amérique du Nord, dont le nombre augmentera 4 fois (ayant cependant un point de départ fragile, un peu plus de 150.000 visites en 2006) et les touristes du reste du monde, ci-inclus le Japon et l'Israël, qui seront à leur tour 4 fois plus nombreux par rapport à une valeur de 180.000 visiteurs enregistrés en 2006». (Master Plan 2007: 165)

Tableau 1 Nombre estimé de visiteurs étrangers pour la période 2006 – 2026 (milliers de touristes / an)

Provenance	2006	2011	2016	2021	2026
UE	2803	3777	4990	6569	8642
Europe non UE (Moldavie, Ukraine, Bulgarie, Turquie, Serbie / Monténégro, Fédération Russe, Biélorussie et petits États)	2886	3428	4022	4663	5340
Amérique du Nord (États Unis, Canada)	164	235	337	484	695
Reste du monde (ci inclus Japon et Israël)	184	267	387	563	808

Réalisé par l'auteur à base des informations fournies dans le Master Plan (p.165) (En 2006, quand la prévision a été faite, la Bulgarie n'était pas encore membre de l'UE)

2.2 Objectifs prévisionnels concernant les dépenses des visiteurs étrangers dans la période 2006 – 2026

L'interprétation des chiffres offerts par le Master Plan (Master Plan 2007: 166) nous a permis d'observer facilement un rythme fortement ascendant; on apprécie que le total des dépenses réalisées en 2026 par les visiteurs roumains et étrangers dépassera la valeur de 16.000 millions d'Euros, dont plus de 7500 millions par les touristes étrangers. Ces sommes détermineront théoriquement, une évolution du PIB de la Roumanie, allant de 3,5% à 6,9%.

L'établissement d'une relation de dépendance entre ces performances financières et la maîtrise d'une/de plusieurs langue(s) étrangère(s) serait un argument suffisant pour une reconsidération des priorités, par l'introduction des compétences linguistiques en langues étrangères au premier-plan des stratégies de développement. L'argent sera utilisé en bonne partie pour le logement, parce que les chiffres prévisionnels indiquent une évolution de la demande de logement, en relation logique avec l'augmentation du nombre des visiteurs.

Dans le contexte d'une croissance moyenne annuelle prévisionnelle presque double pour les nuitées des visiteurs étrangers dans les unités de logement (9,6% par rapport à 5,8%), celles-ci devraient être capables de proposer une offre adaptée; on considère que «la croissance la plus importante sera nécessaire pour les catégories d'unités de logement avec un haut standard de qualité ... Pour les catégories de qualité moyenne une augmentation devrait se produire jusqu'à la fin du Plan, allant de 83.000 à 130.000. Plus de la moitié des chambres correspondant aux catégories de basse qualité ne seraient plus nécessaires » (Master Plan 2007: 167). Ainsi se fait-il que les pensions et les hôtels de catégorie moyenne et supérieure restent la principale destination de séjour pour les touristes étrangers.

2.3 Modifications des habitudes d'information des visiteurs étrangers

On constate que dans le contexte de la révolution informationnelle et de la démocratisation de l'accès à l'information, «il y a un nombre croissant d'utilisateurs de l'internet sur les marchés générateurs de tourisme, qui utilisent de plus en plus l'internet pour la recherche de destinations et pour la réservation en ligne des besoins de voyages». Les solutions offertes par les responsables du tourisme doivent être adaptées et actualisées, afin de s'harmoniser avec les modifications culturelles. «Pour mieux accueillir les exigences de cette catégorie de consommateurs, on doit utiliser le plus possible les moyens électroniques, à côté des voies de communication telles que la téléphonie et la poste électronique». (Master Plan 2007: 106)

Caraiani remarque le rôle des langues étrangères dans la communication virtuelle „un élément important qui influe sur l'utilisation de l'Internet au niveau global et implicitement sur les activités de marketing sur internet; c'est la maîtrise d'une langue de circulation internationale.” (Caraiani 2008: 23)

La demande des touristes doit être anticipée et *accueillie* par les propriétaires d'unités de logement, qui entreront dans une phase de concurrence étroite, simultanément avec la croissance du volume et la transparence des informations publiées sur internet; l'accessibilité de l'information rendra encore plus difficile la fidélisation d'un important nombre de touristes. L'information correcte et actuelle, présentée de manière attractive, dynamique et interactive, seulement en roumain et/ou un nombre réduit de langues étrangères, ne suffit plus si nous nous situons dans la perspective d'un tourisme ambitieux d'attirer des touristes étrangers et de contrecarrer la concurrence faite par d'autres pays. Aussi la promotion virtuelle de l'hôtel ou de la pension sur les propres sites représente-t-elle une solution stratégique valable et valorisable à long terme. La question se pose alors en quelle mesure les unités de logement sont préparées à satisfaire les exigences des touristes étrangers.

3. Étude de cas – département de Bihor (département dans l'Ouest de la Roumanie, à la frontière avec la Hongrie)

Dans cette étude nous suivrons la réflexion multilingue des informations relatives aux unités de logement de la région de Bihor (plus précisément d'Oradea, ville municipale et Băile Felix, renommée station balnéaire située à environ 10 km d'Oradea), telles qu'elles sont représentées sur les sites internet correspondants aux pensions et aux hôtels les plus représentatifs. L'analyse des données collectées par documentation sur internet nous a permis d'inventorier ces unités de logement et d'en rechercher les sites officiels. Un nombre significatif de ces unités ne disposent pas de site individuel, mais bénéficient de présentations en résumé sur des sites type portail, tels que www.tourismbihor.info, www.pensiunioradea.ro, www.bihar-bihor.eu. Celles-ci n'ont pas été considérées dans notre analyse, parce que les versions en langues étrangères qui existent sur les sites de réservation en ligne sont réalisées d'habitude par des modalités autres que la traduction classique du matériel à présenter (c'est bien le cas des dispositifs de traduction automatique, avec des performances amendables).

3.1 Hôtels de Băile Felix (ci-inclus 1 Mai)

Tableau 2 Hôtels de Băile Felix

langue	ROM	HU	EN	GE	IT	FR
total	13	1	3	1	0	0
pourcentage	100%	7,6%	23%	7,6%	0%	0%

Réalisé par l'auteur

L'analyse présente une situation au moins paradoxale et partiellement explicable. Les hôtels de Băile Felix ne valorisent pas le potentiel stratégique de la présentation multilingue sur leurs sites. L'activité touristique dans la zone Băile Felix se réduit de manière inquiétante, mais une solution simple et peu coûteuse comme la traduction du site est ignorée. Sur un total de 13 hôtels, on retrouve une traduction en allemand et une variante magyare. Nous devons cependant prendre en considération le fait que plus de la moitié de ces hôtels appartiennent à SC Turism Felix, société qui a construit un seul site, en langue roumaine, pour tous les hôtels administrés.

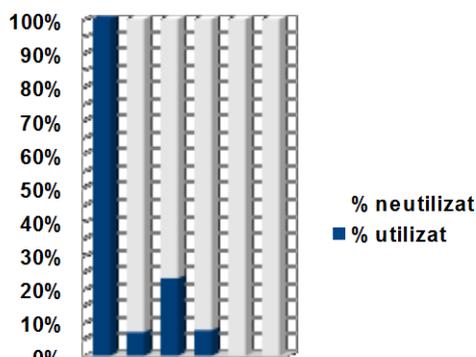
3.2 Pensions, villas, maisons de vacances dans Băile Felix (ci-inclus la localité Sânmartin et la station balnéaire 1 Mai, situées dans le voisinage)

Tableau 3 Pensions Băile Felix

langue	ROM	HU	EN	GE	IT	FR
total	17	2	7	2	2	1
pourcentage	100%	11,7%	41,1%	11,7%	11,7%	5,8%

Réalisé par l'auteur

Figure 1 Hôtels de Băile Felix (réalisé par l'auteur)



le voisinage),

nous avons utilisé comme sources d'information le site du Ministère du

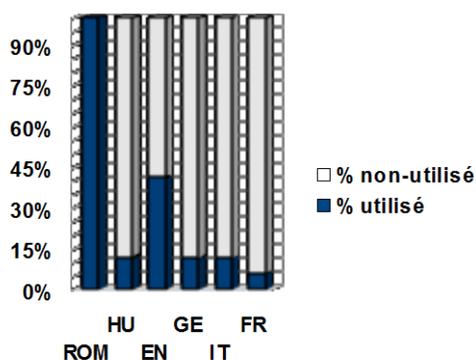
Tourisme et du Développement et de nombreux autres sites de promotion touristique. Sur les 68 pensions, villas et maisons de vacances identifiées comme fonctionnelles et actives, nous constatons que seulement 17 en détiennent des sites individuels, avec un domaine qui porte le nom de l'unité. Nous avons considéré implicitement que l'absence d'un site de promotion excluait d'emblée la préoccupation pour les aspects linguistiques ; ainsi se fait-il que nous avons éliminé de notre évaluation plus de 50 unités de logement qui existent dans la station balnéaire située près d'Oradea. Sur les 17 pensions qui disposent de sites individuels, seule la Pension *Diana* a un site traduit en 5 langues (moins le hongrois, conformément à l'inventaire linguistique final). Nous y voyons un intérêt timide pour les langues étrangères, ce qui au niveau de toute la station se traduirait par un vrai désintérêt ; l'exception en est l'anglais, avec une présence de 40% de sites individuels traduits.

3.3 Hôtels d'Oradea

Dans la ville d'Oradea, nous avons identifié 20 hôtels, avec des classifications entre 2 et 4 étoiles. Par rapport aux hôteliers de Băile Felix, nous constatons un intérêt plus marqué pour les langues étrangères, mais les tentatives sont loin d'être significatives. La majorité des hôtels ont des présentations en roumain et en anglais, un quart d'entre eux bénéficiant de présentations en hongrois, allemand ou italien. Il n'y a pas plusieurs hôtels avec des présentations complètes multilingues, les options pour des langues de présentation étant

Pour inventorier les unités de logement de type *pension, villa, maison*, de Băile Felix (ci inclus la localité Sânmartin et la station balnéaire 1 Mai, situées dans

Figure 2 Pensions de Băile Felix (réalisé par l'auteur)



différentes, en fonction d'unité. Il n'y a pas une stratégie unanimement acceptée dans la promotion des hôtels; un seul hôtel, *Atrium*, a le site présenté en 6 langues étrangères; 2 hôtels, *Ramada* et *Melody*, sont présentés en 5 langues; sur les 4 hôtels avec présentation quadrilingue, nous notons le cas de l'hôtel *Living In*, le seul de ces unités de logement d'Oradea qui a une présentation en hollandais.

Tableau 4 Hôtels d'Oradea

langue	ROM	HU	EN	GE	IT	FR
total	20	6	17	6	6	2
pourcentage	86,9%	26%	73%	26%	26%	8,7%

Réalisé par l'auteur

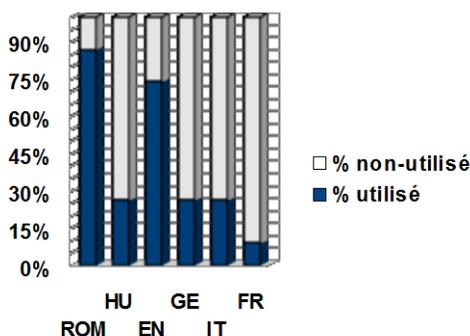
3.4 Pensions d'Oradea

Tableau 5 Pensions d'Oradea

langue	ROM	HU	EN	GE	IT	FR
total	7	2	5	1	1	1
pourcentage	86,9%	28,5%	71,4%	14,2%	14,2%	14,2%

Réalisé par l'auteur

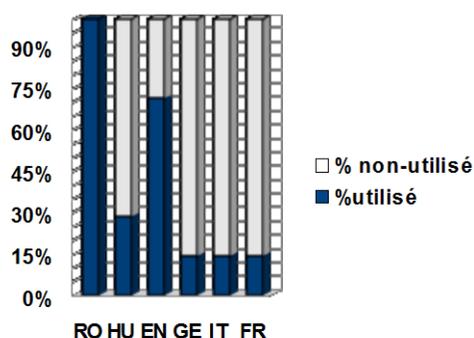
Figure 3 Hôtels d'Oradea (réalisé par l'auteur)



et en anglais sont suffisantes. Une seule pension, *Eclipse*, se présente dans toutes les langues, en utilisant cependant un texte minimal. Malgré l'existence de quelques catégories de touristes en transit, qui préféreraient un logement dans un autre endroit que l'hôtel - un accès à l'information directement dans leurs langues maternelles en faciliterait le choix - les propriétaires de pensions urbaines véhiculent une information «close» dans l'espace d'une langue inconnue pour les touristes (la langue roumaine); une ouverture est réalisée cependant par l'anglais, mais celle-ci est plutôt accessible aux touristes étrangers plus jeunes. Les Français, les Italiens, les Espagnols ou les Allemands d'un certain âge préféreraient leur langue maternelle.

Les pensions d'Oradea sont peu nombreuses, mais elles se remarquent relativement par la même approche de l'information de promotion: on considère que les variantes en roumain

Figure 4 Pensions d'Oradea (réalisé par l'auteur)



Conclusions

Une vue d'ensemble sur les graphiques relève que:

- dans l'espace virtuel des unités de logement de Bihor, l'inventaire linguistique est formé par les langues suivantes : le roumain, le hongrois, l'anglais, l'allemand, l'italien et le française (ROM, HU, EN, GE, IT, FR en abrégations dans le texte);
- on ne remarque pas un intérêt particulier pour les langues étrangères du tourisme; bien au contraire, il est évident que ce potentiel est ignoré, à quelques exceptions près, par les propriétaires privés, a priori plus orientés et plus ouverts vers le nouveau et vers l'optimisation de l'activité dans les unités;
- malgré le fait qu'il s'agit d'une zone transfrontalière, les plus nombreuses unités de logement ne disposent pas de la version anglaise du site;
- les hôtels de Băile Felix ont, en proportion de 23%, des présentations en anglais et ceux d'Oradea en proportion de 73%; les unités de logement plus petites (pensions, villas, maisons) disposent de présentation en anglais en proportion de 40% (Băile Felix), respectivement 70% (Oradea);
- la présence des traductions en allemand, italien ou français peuvent être reliées à la présence constante ou passagère des touristes qui parlent ces langues ou bien à l'intention d'attirer prioritairement des touristes qui viennent des espaces linguistiques correspondants;
- on constate que les langues allemande et italienne occupent une position modeste et relativement égale dans le paysage linguistique de la promotion touristique; le français jouit lui aussi d'une présence modeste, malgré le fait que le public francophone a un potentiel très important, provenant de plusieurs pays: la France, la Belgique, la Suisse, le Canada, etc.;
- on constate l'absence totale de l'intérêt pour des langues comme l'espagnol ou le chinois qui correspondent à un nombre significatif de parleurs au niveau mondial, extrêmement mobiles lors des dernières années ;
- la zone urbaine est plus ouverte a la promotion multilingue des destinations touristiques.

Malgré le fait que «le tourisme este ainsi devenu un secteur économique de première importance, un enjeu âprement disputé par un nombre croissant de pays» (Mesplier et Bloc-Duraffour 1997: 53), il paraît que les plus nombreux acteurs impliqués dans le tourisme roumain ignorent des modalités simples, accessibles et peu coûteuses de renforcement des chances de réussite dans le contexte du tourisme international, l'une des solutions stratégiques en étant la présentation en plusieurs langues, sur le site de l'unité touristique. La traduction d'un site suppose un investissement initial modique, renouvelable surtout dans les données chiffrées; l'actualisation peut en être faite par tout connaisseur moyen de la langue.

Le désintérêt pour les pages de présentation virtuelle en plusieurs langues n'est pas propre aux acteurs locaux du tourisme. La page de promotion touristique www.turism.ro est disponible en quatre langues (roumain, anglais, français, italien) mais des données vieilles y sont utilisées, dépourvues d'une présentation dynamique et interactive. Le site de présentation touristique de Bihor www.turismbihor.info est traduit seulement en anglais et en hongrois.

Plusieurs opportunités de recherche s'ouvrent: une étude sur l'étude du statut des langues étrangères dans la présentation en ligne pour d'autres zones à fort potentiel touristique de Roumanie, la mise en place d'une corrélation entre les performances économiques et le niveau des compétences linguistiques de la région de Bihor, le lien entre la provenance des investisseurs étrangers de la région et les langues étrangères valorisées socialement et économiquement. Ces données complèterons aussi l'argumentation en faveur du

multilinguisme, dans le cadre d'une étude doctorale, menée à l'Université de Reims, France, avec la collaboration d'une équipe préoccupée par la gestion multilingue de l'information, sous la coordination des professeurs J.E. Tyvaert et E. Castagne. Nous ne nous sommes pas proposé dans cet article d'analyser de manière exhaustive les causes de cet état de fait qui définit le profil linguistique dans la zone du tourisme bihoréan; on note seulement la nécessité impérative d'un changement tout aussi drastique que le Master Plan l'exige (Master Plan 2007: 92). Normalement, les langues étrangères devraient occuper une place légitime prioritaire dans la stratégie de développement de la Roumanie, afin que celle-ci devienne une destination compétitive au niveau international. Et nous comprenons par là toutes les langues, puisque «Bien qu'il paraisse certain que l'anglais conservera son rôle dominant de langue internationale des affaires, les autres langues feront la différence entre l'ordinaire et l'excellence et apporteront un avantage concurrentiel». (Rapport Davignon 2007: 5)

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ENGLISH LANGUAGE FOR SUCCESSFUL INTEGRATION: LEARNING FROM THE BOLOGNA PROCESS

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The Bologna Process aims to provide tools to connect the European national educational systems. The purpose of this paper is to analyze what we have learned and what challenges remain today. Since the beginning all participating countries had to agree on a comparable three cycle degree system for undergraduates (Bachelor degrees or Grades) and graduates (Master and PhD degrees) in order to create compatibility and comparability for achieving international competitiveness and a worldwide degree of attractiveness in higher education. The Bologna Declaration, originally signed by 29 countries, has now reached 47 countries, engaged in the process of creating a European Higher Education Area (EHEA), searching to be competitive to launch the European Academia of the 21st Century.

The European Credit Transfer and Accumulation System (ECTS) has turned out to be the perfect tool to design, describe, and deliver programs and award higher education qualifications. Markets and European universities are going to be able to compete overseas in the future if the new regulations let them to create profitable business in the education area. As expected, European Universities have responded promptly and actively to the call.

In the case of small countries like Spain, it is an opportunity to internationalize Spanish universities; moreover, there is the opportunity for the expansion and consolidation of the Spanish language as the second most important foreign language. The 2009 Report highlights that early teaching of a foreign language is advancing in Europe. In lower secondary education, earlier teaching of English is becoming widespread; and the three Nordic countries, Germany, and the UK are the highest innovation performers. The result is a system of higher education more competitive and more attractive for Europeans and non-European students and scholars. Reform is needed today if Europe wants to match the performance of the best performing higher education systems in the world. The English language seems to be the response in the search for a common European answer to solve common European problems.

Keywords: English, Bologna Process, European Higher Education Area, EHEA, Spanish

JEL Code: I23

Introductory notes

The Bologna Process had the aim to create a *European Higher Education Area (EHEA)*. The year 2010 was the reference for achieving this goal since the beginning. More deeply the idea was to build a market for the European Public Education System. Even being so many countries and different cultures were involved in the challenge, with different heritage and tradition, the project is getting going further with the last incorporated countries that are right now participating in the whole network.

From the Bologna Declaration of 19 June 1999, after ten years of willingness, we can talk of reaching *success* in the creation of a wide area of recognition and compatibility in University and Higher Education studies. Taking part in the Bologna Process initially was a

voluntary decision (even if there were not many other choices) made by each country and its higher education community to endorse the principles underlined in the European Higher Education Area. The purpose of this paper is to analyze what we have learned from this important example of fast unification process and what is still the challenge today.

The Bologna Process did not aim to harmonize national educational systems but rather to provide *tools to connect* them. The intention initially was to allow the diversity of national systems and universities to be maintained while the European Higher Education Area was adding more transparency among national higher education systems. The key element was to implement tools in order to facilitate recognition of degrees and academic qualifications, mobility, and exchanges among the European institutions. The reforms were based on ten simple objectives which governments and institutions are still currently implementing. All participating countries had to agree on a comparable three cycle degree system for undergraduates (Bachelor degrees or Grades) and graduates (Master and PhD degrees). It was a duty to follow for whatever country wanting to be part of the big picture, following the general rules applying to the network.

Origins of the project and expected goals

The Bologna Declaration was originally signed by 29 countries in order to reform the structures of their higher education systems in a convergent way. These countries who originally signed the initial agreement were: Austria, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, France, Finland, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Slovak Republic, Spain, Sweden, Swiss Confederation, and the United Kingdom. All of them wanted to keep competitive in the launching the European Academia of the 21st Century.

The Sorbonne declaration of 25th of May 1998 had previously stressed the Universities' central role in developing European cultural dimensions. It emphasized the creation of the European area of higher education as a key element to promote citizens' mobility and employability and the European Continent's overall development. Further than to achieve "greater compatibility and comparability in the national systems of higher education" (mainly an intra-European issue), the Declaration of Bologna wanted to increase "the international competitiveness of the European system of higher education". So it is important for European students themselves but for foreign students attending European education as well. The signatory countries explicitly expressed their goal to "ensure that the European higher education system acquires a worldwide degree of attractiveness equal to [Europe's] extraordinary cultural and scientific traditions".

According to the Bologna Declaration, Europe's response had to support the general principles laid down in the Sorbonne declaration, engaging coordinating of European policies to reach the main objectives considered to establish and promote the European system of higher education world-wide which were the following eight ones:

- Adoption of a system of easily readable and comparable degrees, also through the implementation of the Diploma Supplement, in order to promote European citizens *employability* (person's capability of gaining initial employment, maintaining employment, and obtaining new employment if required) and the international competitiveness.
- Adoption of a system essentially based on two main cycles, undergraduate and graduate.

- Access to the second cycle shall require successful completion of first cycle studies, lasting a minimum of three years. The degree awarded after the first cycle shall also be relevant to the European labor market as an appropriate level of qualification. The second cycle should lead to the master and/or doctorate degree as in many European countries.
- Establishment of a system of credits - such as in the ECTS system – as a proper means of promoting the most widespread student mobility.
- Credits could also be acquired in non-higher education contexts, including lifelong learning, provided they are recognized by receiving Universities concerned.
- Promotion of mobility by overcoming obstacles to the effective exercise of free movement for students, access to study and training opportunities, and for teachers, researchers and administrative staff. Recognition and value of periods spent in a European context researching, teaching and training.
- Promotion of European co-operation in quality assurance with a view to developing comparable criteria and methodologies.
- Promotion of the necessary European dimensions in higher education, particularly with regards to curricular development, inter-institutional co-operation, mobility schemes and integrated programs of study, training and research.

Following the process and getting further in the expansion, the whole area has been increased reaching now 47 countries engaged in the process of creating a European Higher Education Area. We could call it now the Euro-Asia Area according to which countries are now belonging to this “Knowledge Region”. The whole area now includes: Albania, Andorra, Armenia, Austria, Azerbaijan, Belgium, Bosnia-Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Holy See, Hungary, Iceland, Ireland, Italy, Kazakhstan, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Moldova, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Serbia, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, "the former Yugoslav Republic of Macedonia", Turkey, Ukraine, United Kingdom.

It seems interesting to understand how much the Bologna Process has been revolutionary and how far the cooperation in European higher education could expand further of this experience. Markets and European universities are going to be able to compete overseas in the future if the new regulations let them to create profitable business in the education area. As expected, European Universities have responded promptly and actively to the call, but also the countries with near location to the European Union borders.

There are many potential students from countries belonging to South America, Australia or Asia who are investing their money (and/or their governments' money with grants and fellowships) in higher education for attending universities overseas. The opportunity cost for Europe now is very high. They are spending from 5 to 10 years in the United States of America when they used to come to Europe for that education in the past. Most of them wanted to improve their English language skills and knowledge at the same time that they develop their higher education studies. We have to consider seriously about how many students, from China or Japan for example, used to come to Europe or only to the United Kingdom or France, but they are fighting today in order to be able to attend a US university today.

The United States of America is the largest economy in the OECD controlling this international market and would be the only one able to react to the magnitude and significance of the Bologna Process. We have to balance between running following the American model, an open door in the higher education system under which anyone with a high school diploma can enter some institutions that are classified as higher education. The European system is very competitive but not so open to foreign students. Exchange programs have helped a lot for creating the network that let students get official recognition; this would be the case of the ERASMUS program.

Main instrument in use for achieving the goal: the European Credit measure (ECTS)

The European Credit Transfer and Accumulation System (ECTS) seems to have been a good choice for evaluating. ECTS is a tool that helps to design, describe, and deliver programs (or programmes) and award higher education qualifications. The use of ECTS, in conjunction with outcomes-based qualifications frameworks, makes programs and qualifications more transparent and facilitates the important recognition of qualifications.

ECTS was introduced initially in 1989, being one of the cornerstones of the Bologna process, as tool of the credit system for higher education used in the European Higher Education Area, involving all countries engaged in the Bologna Process. First used within the framework of Erasmus, later part of the Socrates program. ECTS was the only credit system which has been successfully tested and used across Europe. ECTS was set up initially for credit transfer. The system facilitated the recognition of periods of study abroad and thus enhanced the quality and volume of student mobility in Europe. Later ECTS was developed into an accumulation system to be implemented at institutional, regional, national and European level.

Recognition of prior learning is a key element in order to promote *lifelong learning* later. Potentially recognized as learning outcomes, ECTS credits describe what a *learner is expected to know, understand and be able to do* after successful completion of a process of learning. They relate to level descriptors in national and European qualifications frameworks. ECTS credits are based on the workload students, which indicate the time students typically need to complete all learning activities (such as lectures, seminars, projects, practical work, self-study and examinations) required to achieve the expected learning outcomes.

Two famous new concepts arrive: “learning outcomes” and “competences”, both used with different shades of meaning and in somewhat different frames of reference. In all cases they are related to what the learner supposedly will know, understand and be able to do at the end of a learning experience. Their widespread use is part of the shift in the arriving paradigm that places the *learner at the heart* of the higher education experience. This shift is the foundation basement of the European Higher Education Area, the Bologna Process and ECTS.

By standardizing the size of components and goals, institutions allow for more flexible, multidisciplinary and interdisciplinary pathways among programs. On the other hand, the definition of learning outcomes within a component has been constrained by the predefined number of credits that set *a priori* the workload for each component. Institutions have a lot of flexibility because they must consider the total time needed by students in order to achieve the desired learning outcomes with potentially several flexible learning paths.

The credit allocation to a new program or component should be validated according to national and/or institutional rules and should be regularly monitored. If evaluations reveal a discrepancy between the anticipated workload and the time actually taken by the majority of students to achieve the expected learning outcomes, becomes necessary a revision of the workload, learning outcomes or learning/teaching methods.

Anyway the big challenge is going to achieve *quality assurance*, which is going to be the primary responsibility for each institution. Taken together, internal quality assurance and external quality review (undertaken by quality assurance agencies) aim to implement *the Standards and Guidelines for Quality Assurance in the European Higher Education Area*. Transparency and accessibility constitute the revolutionary elements for the whole of institutions and apply equally to language too. The publication should be available on the website, and not only in the local language, but preferably also in another widely-used language (which means English language more or less) in order to enhance transparency at international level too.

What becomes important then for institutions is how the new system encouraged them to publish on their *websites* their recognition policy and practices for all formal and informal learning. They have to adapt and renew all the information regarding the new concepts of ECTS and the Diploma Supplement. A “good Course Catalog” means to provide information on the Institution and the courses covering other important aspects in an official way. This effort of renovation and adaptation has represented probably the key factor for improving competition and creating an increasing market which conduct the whole system to modernization, applying to all European universities and educational institutions in general including the oldest and most famous ones.

Research on how countries are responding to the challenge: the case of Spain

In the case of small countries like Spain, the challenge represented an opportunity for getting involved in a huge amazing project of internationalization of the Spanish universities. The best opportunity for Spain could be the expansion and consolidation of the Spanish language as a key element to take into account. Spanish is an important and extended world language, and the one with the highest current rate of growth. Spanish is also the official language used in many international organizations. The United States of America has now more Spanish speakers than Spain and, in fact, it is only surpassed by Mexico. Nowadays, Spain is the third country according to population speaking the Spanish language.

Perhaps the case of Spain does not represent the situation to emulate in Europe. Foreign students can choose to go to study in Spain as a second chance with around 400 million speakers, it is the third most spoken language in the world today, after Mandarin Chinese and English and it is an official language in 21 countries. Anyway, the first reference and the only relevant language in the international higher education right now perhaps is the English language.

Being a big old country at the time of the foundation of the first universities in Europe, Spain has the chance to participate in this knowledge heritage for reaching a better position in the modern global context. So... 'the history of Spain's universities dates back to the beginning of the thirteenth century when the first university institutions were founded in the kingdoms of Castile and Leon, under the auspices of the *Cathedral Schools* of Palencia (between 1208 and 1214) and Salamanca (1218). During that century, many of the

kingdoms in the Peninsula created their own *Studia Generale*. Institutions of this kind were established in Valladolid towards the middle of the century, in Lleida between 1279 and 1300, and in Alcalá in 1293. The greatest expansion took place between 1450 and 1625, with the opening of universities in Barcelona (1450), Santiago de Compostela (1495), Valencia (1499), Granada (1531) and Oviedo (1608).

In modern times, the Spanish university boom coincided with the process of decentralization following the ratification of the Spanish Constitution in 1978, as many sectors of society began to demand access to higher education for the first time. In 1984, Spain had 34 universities and 700,000 students. By 1995, almost a million and a half students were enrolled at a total of 51 universities, and five years later the number of universities had risen to 61. [...] Today, in 2011, the Spanish university system is made up of 76 public and private universities which offer students from Spain and abroad a broad-ranging, highly-regarded variety of courses at undergraduate, master's and doctoral levels'.

The Spanish site map (<http://www.universidad.es/>) reflects what are the important questions to be answered and other relevant information not so relevant for the big challenges:

- The Foundation (The Foundation Universidad.es / Contractor's profile / Presence abroad / Job opportunities / Documents).
- Universities (Spain's universities / Other teaching and research centres / Who is Who)
- Degrees (The Spanish university system / University admissions / Degrees / Degrees in foreign languages / The cost of studying in Spain)
- Research and innovation (Research / Innovation)
- Studying Spanish (Why study Spanish? / Before arriving / During your stay / Other co-official languages / Diplomas in Spanish (DELE-Diploma of Spanish as a Second Language)
- Information and resources (Before arrival / During your stay / Scholarships / Getting to know Spain)
- Fairs and events (Calendar) // Alumni Network // Online student and researcher service (Talk to us / Frequently asked questions) // Mapa web

Conclusion: English is the only language and an advantage for Northern countries

Sharing and exposing so much relevant information for all the universities will help students from all over the world and systems to improve and choose a better way. The first mandatory step is been developing by all the universities in Europe. The second step is to react to the big challenges and to implement a new policy according to the best practices that could be designed. The continuation of the reform process needs the acceptance among teachers and students but English seem to be the only important language for going ahead.

According to the 2009 Report is highlighted that early teaching of foreign language is advancing in Europe. In lower secondary education, earlier teaching of English is becoming widespread. The three Nordic countries (SE, FI, DK), Germany, and the UK are the highest innovation performers as measured by the European Innovation Scoreboard and a strong concentration of the "creative class" with high educational attainment in and around capital cities contributes to the performance.

In the whole region students are supposed to be able to choose from a wide and transparent range of high quality courses and, more important, they would benefit from smooth recognition procedures. The Bologna Declaration of 1999 has put in motion a series of reforms needed to make European Higher Education more compatible and comparable

being applied simultaneously in all the countries involved. The result would be a system of higher education more competitive and more attractive for Europeans and non-Europeans, for students and scholars coming from other continents. Reform is needed today if Europe wants to match the performance of the best performing systems in the world, notably following at least the United States and Asia education systems.

The Declaration reflected a search for a common European answer to solve common European problems. The process originated from the recognition that in spite of their valuable differences and language limitations, European higher education systems were facing common internal and external challenges related to the growth and diversification of higher education, the employability of graduates, the shortage of skills in key areas, the expansion of private and transnational education, etc. The Declaration recognized the value of coordinated reforms, compatible systems and common needed action.

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2. EURYDICE - The information network on education in Europe

http://ec.europa.eu/education/linkhomepage/linkhomepage342_en.htm

3. European University Association (EUA)

<http://www.eua.be/eua-work-and-policy-area/building-the-european-higher-education-area/bologna-basics.aspx>

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5. The European Higher Education Area (EHEA) official website

<http://www.ehea.info/>

6. The official Bologna Process website July 2007 - June 2010

<http://www.ond.vlaanderen.be/hogeronderwijs/bologna/>

7. The Teaching International Students Project

<http://www.heacademy.ac.uk/ourwork/teachingandlearning/internationalisation/bologna>

8. Universities in Spain

<http://www.universidad.es/universities>

BUSINESS BUZZWORDS: RIGHTSIZING, DOWNSIZING, RE-ENGINEERING, DE-LAYERING

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The paper attempts to analyse the rise and use of a new vocabulary (economic buzzwords) related to staff dismissal in the new economy of the world. In this new economy, the organizational boundaries between states and firms become unclear and a new vocabulary has been conceived in order to express the changes the firms are undergoing. The new rhetoric includes buzzwords like privatization, de-regulation, re-engineering, rightsizing, downsizing, de-layering, quality service or global sourcing. The research is based on the conclusions of bibliographical and direct research of the literature relevant in the field, trying to emphasise the importance of strategic language when it comes to human resources management. Concepts like “freedom of speech”, “politically correct language” or “non-discriminatory language” are brought to attention and analysed focusing on their importance during periods of change and uncertainty characterising the economic environment nowadays. Two trends are depicted in the paper: the first is that of the supporters of political correctness who attempt to homogenize the language and thought to enhance the self-esteem of minorities. One approach to reaching this goal is to eliminate discriminatory or offensive words and phrases and the substitutions of harmless vocabulary at the expense of economy, clarity, and logic. Another approach is to deconstruct a word or phrase into its component parts, treat the component parts as wholes, and focus on secondary meanings of the component parts. On the other hand, reflecting upon the nature of large-scale organizational restructuring, there are the critics arguing that this type of language is a euphemistic form of phraseology. The analysis starts with the assumption that the economic lexis is not a rigid system of terms. Morphologically, there is a high degree of variety in productive types of compounding which exceeds the possibilities that exist in the common English vocabulary. In this view, four buzzwords (rightsizing, downsizing, re-engineering, de-layering) have been chosen as representative for this process and, also, due to the difficulty of translating them into Romanian. Also, the etymology of these buzzwords is analysed and by this the paper attempts to find why managers have adopted these as their favourite terms when discussing large-scale organizational restructuring.

Keywords: buzzwords, rightsizing, downsizing, re-engineering, de-layering.

JEL Code: Y90.

1. Introduction

There are numerous researchers in the sociology of organizations and the study of social movements who have examined the strategic use of language. Whether it is called rhetoric (Suddaby and Greenwood 2005:35-67), or framing (Benford and Snow 2000:409-430), these studies have shown how language can be used to influence perceptions of events or practices, and that these perceptions can influence behaviour and actions. Metaphors especially are considered to be a very powerful tool in this process. Lakoff and Johnson (1980) stated: “The essence of a metaphor is understanding and experiencing one kind of

thing in terms of another” (Lakoff and Johnson 1980:5). Metaphors are used to elucidate an abstract or difficult concept by stating it in terms of a concept which is easier to relate to. The two authors go on showing how metaphors are used in everyday language to the point that they go undetected in people’s basic understanding of concepts. In all aspects of life, people define reality in terms of metaphors and then proceed to act on the basis of the metaphors. They draw inferences, set goals, make commitments, and execute plans, all on the basis of how they in part structure their experience, consciously and unconsciously, by means of a metaphor (Lakoff and Johnson 1980:158).

Matissa Hollister considers that, in a related process, perceptions are influenced by the practice of naming or labelling, quoting Safford (2009): “People rely on these labels to figure out how to behave toward one another. So the power to shape the meaning and application of such labels lies at the heart of politics in both organizations and society more broadly. It’s something to be taken seriously”. (1)

The literature in the field shows that the use of strategic language is especially important during periods of change and uncertainty, when the new conditions and environment require new non-routine practices (Fiss and Hirsch 2005:29-52). In these conditions, strategic language can be used in order to accomplish the tasks associated to the job.

2. Non-discriminatory language or “politically correct” language

No society has ever permitted total freedom of speech without any restrictions whatsoever and it is hard to see how it could. In contemporary America and Britain there are a multitude of restraints on free speech. A large number of employers place restrictions on their employees’ freedom to speak about their work or to go to the press. These restrictions are usually presented as matters of respect for authority, or not bringing the company into dispute or just good manners, but they remain restrictions on freedom of speech nonetheless. Recently, there have been attempts to broaden the concept of *non-discriminatory language* beyond its application to gender to consider traditional language that discriminates against people on the grounds of: race, ethnicity, religion, age, sexual orientation, physical ability or physical appearance. Hence, the phrase “politically correct” language was coined. The term “politically correct” appears to have originated within the left. Paul Berman states that: “Politically Correct’ was originally a phrase on the Leninist left to denote someone who steadfastly toed the party line. Then it evolved into ‘PC’, an ironic phrase among wised up leftists to denote someone whose line-toeing fervour was too much to bear. Only in connection with the PC debate itself did the phrase get picked up by people who had no fidelity to radicalism at all, but who relished the nasty syllables for their twist of irony” (Berman 1992:5).

In some critics’ opinion “political correctness” becomes ludicrous and self-parodying. For example, Beard and Cerf (1992) analyse terms such as *differently abled* (of a person confined to a wheelchair), *nonwaged* (unemployed), *physically challenged* (disabled), *vertically challenged* (short), *horizontally challenged*, *differently-sized*, *sizeism survivor* (fat), *cattle murderer* (grazier or rancher), *melanin-impoverished* (white), *sex worker* (prostitute), *unpaid sex worker* (wife), *achieve a deficiency* (fail), *member of a career-offender cartel* (mafioso), and *substance-abuse survivor with difficult-to-meet needs* (alcoholic serial killer) (Cerf and Beard 1992).

Modern dictionaries of euphemism like Ayto (1993) include politically correct expressions among their entries, considering that the phrase *politically correct* is completely mixed up

with euphemism and jargon. In *Copy Editing for Professionals* (2000), Edmund Rooney and Oliver Witte define euphemisms as a “polite expression for an impolite idea.” They state: “Euphemisms are offenses against plain speech and clear communication, which is why bureaucrats and the politically correct love them... Perhaps those who have been fired from their jobs would be more accepting if they understood that they participated in the corporate *downsizing*. It didn’t take long for *downsizing* to acquire a bad name (*down* has an unfavourable connotation), so the term became *rightsizing*” (Apud Knight 2003:129). Yet, contemporary studies on non-discriminatory language deny that the use of politically correct terms is euphemistic. They consider that the use of politically correct language calls for a more precise and accurate use of language.

3. Buzzwords

The word buzzword is a neologism coined in the 1960’s. A buzzword is “a word or phrase... often authoritative or technical that is a vogue term in a particular profession, field study, [or] popular culture (Random House Dictionary). Yet, this definition essentially collapses buzzwords into jargon or argot. “Jargon” is a medieval word meaning gibberish. “Argot” means the languages of thieves and rogues. Nowadays, both terms have retained the pejorative meaning and they are used to criticize the secret codes of particular groups, especially of professions.

According to Kaufer and Carley (1984), buzzwords cannot provide detailed elaboration of what the buzzword strictly means. Unlike argot, a buzzword is “never a dense reference. A buzzword functions rather as an instrumental reference to topics that are only loosely connected to it” (Kaufer and Carley 1984:178). Buzzwords are the reality of the impact a specialised group has on the larger culture. Buzzwords are coined when the words of an inside community have implications for a larger community of outsiders, even when the outsiders cannot fully grasp the precise meanings of the words.

Specialised language is not a fixed set of terms. It evolves and renews itself according to the changing interests within communities of practice. According to Roos (1987), “the lexis of business and economics is characterised by a high degree of freedom, productivity, creativity and imagination” (Apud Crawford Camiciottoli 2007:138).

Redundancy and dismissal are one area of management practice that particularly suffers from euphemistic jargon. According to Redman and Wilkinson (2005), some of the terms managers use include: *building down, career alternative, enhancement program/career, re-appraisal, compressing, decruiting, de-hiring, dejobbing, de-layering, demassing, de-selection, disemploying, downscoping, downsizing, involuntary quit, lay-off, letting-go, non-retaining, outplacing, payroll adjustment, previously unrecognized recruitment errors, rationalizing, rebalancing, re-engineering, releasing, resizing, re-structuring, retrenchment, rightsizing, separation program, severance, slimming, streamlining, termination, volume-related production schedule, adjustment, wastage.* (2)

3.1 Business buzzwords: *rightsizing, downsizing, re-engineering, de-layering*

Rightsizing, downsizing, re-engineering or de-layering are “politically correct” terms relating to the planned reduction of programs or staff.

- My uncle was “dehired”.
- John Taylor was “involuntarily separated” from the company.
- Alec Smith was “downsized”.

- Jane Alexander was “de-recruited”.

Yet, regardless of the name, these words should be thought of as a change process, to be implemented with the same thoughtful, systems approach as any other major organizational development initiative. Authors like Collins (2000) noted the damage that these words had upon lives and communities, bringing into attention the comparison that Moore (1997) made between radical, organizational restructuring initiatives and terrorism (Collins 2000:312).

Whatever the label, the tendency of companies to reduce their staff in response to an economic disaster affects their employees at all levels. It has been seen that “from banking to home appliances, industries are shedding jobs and eliminating excess capacity. And even when companies bulk up to compete globally, they’re paring their work forces to hold down costs” (*Business Week* 1991: 88-89). *Business Week* (1992) also reported that “Since the mid-1980s, as corporations have responded to global competition and technological change by merging and consolidating, downsizing and de-layering, some 2 million middle management positions have been permanently eliminated” (*Business Week* 1992: 56-63).

“Downsizing,” “rightsizing,” or “re-engineering” represents the lean philosophy of American business today. An important indicator of the high degree of freedom characterising the lexis of economics is word compounding, or the process of forming new words from two or more independent words. The words analysed in this paper are formed by extensive compounding:

- a. adjective + *ing*-verb: *right-sizing*, *down-sizing*
- b. prefix + *ing*-verb: *de-layering*, *re-engineering*.

a. Rightsizing

The first popular buzzword was *rightsizing*. It refers to reducing the total size of the people employed by the company to cut down on costs. Implicitly, there is the assumption that the company being downsized is essentially over-staffed and that performance levels can be maintained or even improved by reducing the number of the employees. *Rightsizing* is often used as a euphemism for *downsizing*, or *de-layering*, with the suggestion that it is not as far-reaching. This term was coined because many companies discovered that the people given voluntary retirement were performing useful functions which cannot be handled effectively by the remaining staff. Theoretically speaking, the term *rightsizing* implied that companies should determine and maintain only right employment for its requirements and increase their efficiency and reputation. (3)

b. Downsizing

The practice of downsizing and the use of the term *downsize* emerged in response to the economic crisis of the early 1980’s. It marked an end to the social contract of long-term commitment between employers and workers and downsizing continues today, as showed by daily announcements of job reductions. Downsizing refers to the reduction of employment in an organization (McKinley, Zhao and Rust 2000:227-243). The label of “*downsizing*” played a role in the process in which the corporate players had to convince themselves and others that the practice was both effective and ethical. Using an implied metaphor helps both explain why the practice would work and reduce concerns about the moral questions. This buzzword is a “convenient, shorthand form of phrasing deployed to disguise the meaning and effects of recent organizational restructuring activities, which acts to distance management from responsibility for mass dismissal associated with organizational restructuring since the 1980s” (Collins 2000:282).

Downsizing is also commonly called *reorganizing*, *re-engineering*, *restructuring*, or *rightsizing*. Regardless of the label applied, however, downsizing essentially refers to layoffs that may or may not be accompanied by systematic restructuring programs, such as staff reductions, departmental consolidations, plant or office closings, or other forms of reducing payroll expenses. Matissa Hollister suggests three possible dimensions along which “downsizing” could differ from “lay off”. The first dimension is related to people arguing that layoffs are just one of several tools used in downsizing for job reductions may also be achieved voluntarily retirement. A second distinction between “downsizing” and “layoffs” refers to whether the job losses are temporary or permanent. Previously, layoffs used to refer to temporary dismissal from work because these were the most common types of job reductions. In what downsizing is concerned, when it was first introduced, the job losses were permanent. The third possible dimension is related to the fact that downsizing must involve specific intentions. (4)

Commonly, “downsizing” and “redundancy” are considered synonyms, linguistic alternatives conveying the same meaning. According to Collins (2000), this is not “quite accurate since where redundancy situations are associated with a decline in both employment and work, downsizing is associated with a reduction only in former” (Collins 2000:286). The same author argues that while the term “downsizing” is used to describe factors associated with the radical restructuring of the organization, the etymological origins of the term suggest a qualitatively different type of concern with “structures” and their “restructuring”: “The term downsizing has its origins in the US automobile industry – particularly in Detroit – where it was used to encapsulate the driver to reduce car size and engine capacity in response to the oil crisis and the growth of environmental concerns during the early 1970’s” (Collins 2000:286). In this view, the term “downsizing” might be considered as an effort, facilitated by euphemism, to accentuate key moments of downsizing, moments of planning, strategy and the inevitable business outcomes of competitive imperatives, while downplaying other negative moments, months of uncertainty, hardship and enforced mobility within a changing system of work (Apud Collins, 2000:288).

c. Re-engineering

Re-engineering is the process of removing levels in the hierarchy. The purpose is to give the organization a flatter structure and thus the decision-making process is pushed down to lower managerial levels. The assumption is that this will produce quicker decision-making by managers who are closer to their customers and more in touch with their competitive environment. The studies show that the re-engineering concept is built on a previous eclectic collection of terms relating to competitive advantage. The metonym of the 1990’s, “re-engineering” (Hammer and Champy 1993:32) or “strategic core re-organization” (Fairbrother 1991:69) has become executive rhetoric in both private and public organizations. At the end of the 20th century, the term *re-engineering* lost its appeal and the new terminology of *global sourcing* emerged (Kakabadse and Kakabadse 2000).

d. De-layering

The reasoning behind *de-layering* lies in the belief that as organizations grow, they become unmanageable, bureaucratic, and inflexible. More than that, they can be suffocated by rules and procedures, slow decision-making processes, and a lack of creativity. The solution is to

flatten the structure (*de-layer*) to streamline the operations and increase flexibility and responsiveness to customers and competitors. *De-layering* is normally associated with other management initiatives, such as *Total Quality Management*, *business process re-engineering*, or *continuous improvement*. (5) De-layering has important consequences for managers because it invariably leads to job losses and, also, increases the number of tasks at work and responsibilities of lower-level managers. Even if it is accepted that some of the activities of middle management add little or no value and can be eliminated or contracted out, there are inevitably many aspects that will be passed down the hierarchy, which leads some commentators to suggest that many contemporary managers are now seriously overworked, although they may also be better paid.

4. Conclusions

Words are the primary means by which people communicate. Broadly conceived, political correctness includes a number of initiatives such as: altering vocabularies in order not to offend particular groups, affirmative action in admissions and hiring, and broadening the aim of classical texts to include those written by minority authors and women, not because of the quality of these texts but because they reflect minority realities. When words are eliminated from use due to political incorrectness, the options for conveying messages in the clearest and most accurate form are reduced. For the most part, the larger the vocabulary used by a sender and a receiver, the greater the opportunity to accurately transmit messages. Also, when certain terms are replaced with new words whose meanings are less well understood, the probability that the messages will be received as intended is reduced. Business relations in the new economy are completely different, therefore, the new rhetoric of organizations has included *flexibility*, *responsiveness*, *privatization*, *de-regulation*, *re-engineering*, *restructuring*, *de-layering*, *agility*, *quality service* and *global sourcing*, a rhetoric which reflects the rise of the network society, multi-layered governance and the new production of knowledge.

For a native speaker of Romanian who has acquired a partial command of English it might sometimes be difficult to judge whether a given politically correct expression is appropriate or not, or whether a given expression is funny or not. From a linguistic point of view political correctness seems to have no future either in English or in any other language because in spite of its highly inflective character in the past, in the last century English has shown a remarkable tendency towards economy.

Notes:

(1) Apud Hollister, M., "Speaking of Downsizing. The use of the term 'downsizing' in American news media 1975-200", available at <http://www.dartmouth.edu/~socypdfs/HollisterSpeakingDownsizing.pdf>

(2) *Idem, ibidem*.

(3) "What is the difference between rightsizing and downsizing?" available at <http://www.enotes.com/business/q-and-a/rightsizing-downsizing-understanding-difference-114065>.

(4) Hollister, M., "Speaking of Downsizing. The use of the term 'downsizing' in American news media 1975-200", available at <http://www.dartmouth.edu/~socypdfs/HollisterSpeakingDownsizing.pdf>

(5) "Total Quality Management, business process re-engineering." [Available at http://www.jrank.org/business/pages/359/delayering.html](http://www.jrank.org/business/pages/359/delayering.html).

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VOICE PROBLEMS IN TRANSLATIONS OF ROMANIAN AND ENGLISH ECONOMIC TEXTS

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The difficulties brought about by the passive constructions have been an issue to debate for many linguists and scientist. Translations become ever more important in an increasingly global marketplace, and they are sometimes taken too lightly, when in fact it is a serious business that should be approached sensibly in order to avoid poor results.

Business translation is a specialised branch of translation, which requires specific skills and also methodology, theme as well as terminology competences.

Without being exhaustive the aim of our paper is to focus on the types of the passive constructions specific to the scientific discourse, the economic one, in particular. It also tackles the translation difficulties that may come along when dealing with scientific papers and rendering texts from Romanian into English. Passive constructions are frequently used both in English and Romanian. However, active forms are more common in literary writing or where the focus is on the people who make things happen. In contrast, passives are mainly specific to texts where the focus is on events and processes, in things that happen.

The most common problem in writing economic texts is overusing the passive voice. Specialists recommend or even require the passive voice in scientific, technical writing; motivating that by using the passive voice in scientific writing it achieves an objective tone whereas, sometimes it only obscure the text.

The scientific discourse and the economic one in particular, basically mean presenting ideas, descriptions, definitions, classifications, instructions, etc. The speech is brief, the technical person, and the scientist managing to say things which in ordinary language would require a vast amount of talk. Therefore, speakers or writers use the passive constructions in the scientific discourse for the following reasons: a) when there is no use of identifying the agent of the action, being unimportant or obvious from the context; b) to avoid repetition of the subject; c) to put emphasis on the action or the process; d) to convey objectivity; e) to avoid a long active subject.

Keywords: translation, passive voice, Romanian language, English language, difficulties

Cod Jel: Y90

1. Introduction

The general tendency is to consider translation as something that anybody can do with the help of an adequate dictionary. In fact, producing a written text using another text as a basis is a much more complex phenomenon than what is commonly believed. This difficulty becomes even more evident when the text in question deals with specialized, technical subjects such as finance, banking, or the like. Specialists have argued that the main difficulty of scientific English in general, business or economic English in particular, lies more with the grammar than with the vocabulary. In this particular case, when words belonging to the so-called General English appear next to specific terms and within a specific context, they contain nuances that must be accounted for in the final translation.

It is common sense that translators are responsible for and faithful to source texts. Professional translators should be expert linguists who know quite well the correct grammar of both the source language and the target language.

2. Definitions

The scientific rigor of this paper cannot be without previously dealing with the fundamental concepts of passive voice on one hand, and the scientific or specialized text on the other hand. First, let us review what passive voice is.

2.1. The passive voice is a grammatical construction in which the subject of a sentence or clause denotes the recipient of the action rather than the performer, that is, a category of verbs that is related to what thing or person is acting and what thing or person is being acted upon (Crystal 1997). It should be noted here that both active and passive constructions exist in English as well as in Romanian. In the English language, the English passive voice is formed with an auxiliary verb (usually be or get) plus a participle (usually the past participle) of a transitive verb. In Romanian the passive voice is formed with the auxiliary a fi and the past participle of the verb to be conjugated, the participle behaving like adjectives, and thus agreeing in number and gender with the subject.

e.g. The contract was signed by all the members of the Board.

Contractul a fost semnat de către toți membrii Consiliului.

Not all verbs can be expressed in the passive voice either in English or in Romanian for example *die*, *arrive* and *have* are all inherently active. According to Greenbaum and Quirk, the distinction between active and passive applies only to sentences where the verb is transitive (Greenbaum and Quirk 1990:44; Popescu 2001:107).

2.2. Specialised language. The concept of technical or specialized language bears several features, among them, according to (Bakr-Serex 1997: 54):

- a) logical order of statements with clear indication of their interrelations and interdependence;
- b) the use of specific terms to each given branch of science;
- c) the frequent use of specific pattern-sentence, the impersonality of this type of writing being mostly revealed in the use of *passive voice constructions* with which scientific experiments are generally described;
- d) the use of its own terminology, besides the specific syntax.

Specialists recommend or even require the passive voice in scientific, technical writing; motivating that by using the passive voice in scientific writing it achieves an objective tone. The scientist's use of language is "specialized" and "peculiar", the speech brief and the language effective and powerful. (Bloomfield 1933:74).

Scientific discourse basically implies written scientific English. It mainly concentrates on presenting ideas, descriptions, definitions, classifications, instructions, etc. The fundamental characteristic of the scientific discourse is conciseness. As J. Swales discusses, the passive is generally used "to give the information in the best possible way: impersonally, concisely, objectively and giving importance to the most important facts" (apud Croitoru 1996:138).

In the scientific texts, the passive is mainly used for rhetorical purposes. The most common uses of the passives is when the action is more important than the agent, as in formal notices, instructions, processes, etc, which are specific to the scientific discourse.

e.g. *The employee **has been given** instructions to review the balance sheet. (by the employer).*

This passive sentence is about the employee.

In an active sentence, the agent, the doer of the action usually comes first:

e.g. *The employer **has given** the employee instructions to review the balance-sheet.*

Thus, the sentence in active voice is about the employer, not the employee.

3. The Use of the Passive Voice: when, why, how.

The scientific discourse abounds in passive construction; the emphasis is usually put on the action itself, on the person or thing that “suffers” from the action or on the results of the action. There are some cases when the agent is not even mentioned the so-called agentless sentences such as:

- the agent is not important, the emphasis being on the object
e.g. *The solution **has been discussed** for more than two hours.*
*25 votes **are required** to pass the bill.*
*The delivery notes **are being written** (by Mr. Smith).*
*The goods **will be delivered** immediately.*
- the agent is unknown
e.g. *The credit card **has been stolen**.*
*Our letter **hasn't been answered** yet.*
*Over 120 different contaminates **have been dumped** into the river.*
- The speaker or writer intends to make a statement impersonal:
e.g. *The invoice **should have been** thoroughly **checked** 20 minutes ago!*
*Appointments **are required** in such cases.*
- the agent is obvious:
e.g. *Many cases of fraud **have been solved** nowadays.*
- the agent is a long phrase:

e.g. active: *The union leaders as well as the management **concluded** the agreement.*

passive: *The agreement **was concluded**. (both by the union leaders and the management).*

- in the scientific genre that traditionally relies on passive voice when the focus is usually on events or achievements, rather than on agents:

e.g. *This cost-effective method **has been applied** in many computer companies.*

*Contracts **can be cancelled** within five business days.*

- When deliberately you do not wish to name the agent, i.e. you want to be vague about who is responsible. According to Emery (2005), “the passive voice is often used as a strategy that allows language users to avoid mentioning the agent”, and in majority of cases, the subject of the active verb – the agent - is not expressed in the passive.

e.g. *One thousand dollars **has been contributed**.*

*The net benefits of subsidiary divestiture **were** grossly **overestimated***

However, the passive voice is especially used when there is a need to *be diplomatic* or want to avoid personal pronouns to create an *objective* tone.

e.g. *I **recruited** seven programmers last month.*

*Seven programmers **were recruited**.*

*You lost the shipment.
The shipment was lost.*

Here we actually have to do with one of the most famous political uses of the passive: to hide blame or obscure responsibility. *You* wouldn't do this, but you can learn how to become a critic of those who exhibit what George Orwell included among the "swindles and perversions" of writing (apud <http://www.unc.edu/depts/wcweb/handouts/passivevoice.html>).

e.g. *Mistakes were made.*

The Exxon Company accepts that a few gallons might have been spilled.

It costs so much money to pay for these campaigns that mistakes were made here by people who either did it deliberately or inadvertently. Now, others—it's up to others to decide whether those mistakes were made deliberately or inadvertently. (Bill Clinton, January 28, 1997)

4. Passive versus Active Voice.

There is always a strive to achieve a style that is so clear that their messages cannot be misunderstood. One way to render a clear style is to minimize the use of the [passive voice](#). Although the passive voice is sometimes necessary, often it not only makes the writing dull but also can be ambiguous or overly impersonal. Here's an example of the same idea expressed both passive and active voice:

e.g. *The net benefits of the subsidiary divestiture were grossly overestimated.*

(passive: Who did the overestimating?);

The Global Finance Team grossly overestimated the benefits. (The second version is clearer and thus preferable).

Another reason for this shift in our psychological thinking about science: nowadays there is a growing demand for greater transparency in science by requiring that published scientific and specialised papers in general, and economics texts in particular. Active voice proves a better choice when emphasizing the agent of the action. The other good reason behind this growing preference for active voice is stylistic: often passive voice is simply more awkward, less direct, and less clear and this will be later tackled in the paper.

But historically the sciences have encouraged the use of passive voice. And the reason for this tradition was that passive voice helped emphasize the objectivity of the sciences better:

e.g. *Microsoft was founded in 1975.*

The employee was last seen entering the warehouse two hours ago.

The passive voice can also prove useful if you want to put the doer of the action at the end of the sentence in order to create a bridge to the next sentence:

e.g. *Saturn was created in 1985 by General Motors. GM, the world's largest auto maker, was trying to learn a new way to build and market cars.*

5. Difficulties in Translating Passive Constructions

Technical translation has been considered as part of specialized translation; consequently being non-cultural, it is universal, as the benefits of technology are not limited to one speech community. (Ionescu 2000:217). The most common problem in writing and then translating economic texts is overusing the passive voice but it is seldom easy to cut down on the *passive* just to avoid any misunderstanding or ambiguity. All that is required in fact is the accuracy and clarity of expression achieved also by verbal expressions. Scientific

translations differ from ordinary and literary ones as they do not accumulate emotional associations and implications.

Specialists advise the use of active voice in such texts, as much as possible as it is agreed that active voice adds value to the force and strengths of the texts.

There are situations when the use of voices does not coincide in Romanian and English. Some technical novice translators display a tendency to translate English passive sentences literally into Romanian and vice versa:

a. A common mistake in translating a passive construction is due to English **wording** which differs from the Romanian one: in a passive sentence the subject takes front position as compared to the Romanian one beginning with the predicate:

*e.g. The Memorandum of Association is normally **signed** by at least two subscribers.*

*Contractul de asociere **se semnează** în mod normal de cel puțin doi dintre asociați.*

*A company is **formed** by the issue of a certificate of registration by the Registrar.*

*Pentru **a înființa** o firmă se depune certificatul de înregistrare la Registrul Comerțului.*

*The Certificate of Incorporation **will be issued** in a few days.*

***Se va emite** certificatul de înmatriculare în câteva zile. (Pop and Sim, 2005: 20-23).*

b. The so-called **report verbs** (verbs that report people's opinion) like: *request, believe, think, claim, mention*, etc., are commonly used with impersonal passive constructions like infinitive followed by verbs of saying or thinking. The passive construction is employed to avoid a weak subject or to give an opinion that is shared by a large number of people. It is another difficult construction pattern to be rendered from Romanian into English or vice versa: Examples in case are the following:

*e.g. These accountants **are known** to be very thorough.*

***Se știe / se cunoaște** faptul că și contabilii sunt foarte minuțioși.*

***It is believed by the company staff that** the current chief accountant will be appointed manager.*

*Personalul firmei **crede** că actualul contabil șef va fi numit director.*

***It is believed that** the stocks will go up within the next five days.*

***Se crede** că acțiunile vor crește în următoarele cinci zile.*

c. Causative **get** and **have structures**, which can be used in both active and passive patterns may create difficulties of translation. Mention must be made that *get* passives only occur in dynamic events, *be* passives are not sensitive to dynamicity, and therefore can be used in both dynamic and static events, which explains why *be* passives are more common. These structures are more commonly used in spoken English rather than in written English. Thus, the active patterns **get + person +to-infinitive**, or **have + person + bare-infinitive**, have the meaning "cause or order somebody to do something". (Maftei and Dobrota, 2009: 318)

*e.g. The President will **get** the trustees **to sign** the agreement.*

*The President will **have** the trustees **sign** the agreement.*

*The boss will **have/get** the computer **fixed** in half an hour.*

d. Phrasal verbs are commonly used in the passive. The main difficulty caused by phrasal verbs, either in active or in passive is that they have different meanings and when used in the passive its meaning may be even more problematic.

e.g. *The meeting was **called off** by the Chairman. Întâlnirea a fost anulată de Președinte.*

*The red invoice **will be handed in** three days. Factura în roșu va fi predată în trei zile.*

*The agenda for the next meeting **is being whipped up**. Se discută ordinea de zi pentru ședința următoare.*

There are instances when it is possible to end a sentence with the preposition of the phrasal verb that was made passive:

*Active: A high price **might weigh** our product marketing **down**.*

*Passive: Our product **might be weighed down** (by a high price.)*

Active: Un preț prea mare ar putea împiedica vânzarea rapidă a produsului nostru.

Passive: Vânzarea produsului nostru ar putea fi încetinită de un preț prea ridicat.

e. Collocations are two or more words that often go together just because they sound "right" to native English speakers, who use them all the time such as: *deal with, head for, insist on, prevent from, rely on, save from, reply to, to run out of, start up* etc. Sometimes grasping the exact meaning of a collocation and rendering it into the target language may be a real challenge.

e.g. *He **must be prevented from** leaving the company. (Pop and Sim, 2005:12)*

Trebuie să fie împiedicat să părăsească firma.

*The company **has been saved from** bankruptcy.*

Compania a fost salvată de la faliment.

*The goods **have been paid for** by cash and not by Bills of Exchange.*

Plata pentru bunuri s-a făcut în numerar și nu prin cambii.

5. Conclusions

As it has been demonstrated, passive constructions are frequently used both in English and Romanian. However, active voice is mainly employed in literary, creative text whereas passives are very common with exact, scientific, specialised pieces of writing.

To conclude, passive constructions in the scientific discourse are used for the following reasons: 1. when there is no use of identifying the agent of the action, being unimportant or obvious from the context; 2. to avoid repetition of the subject; 3. to put emphasis on the action or the process; 4. to convey objectivity; 5. to avoid a long active subject.

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SECTION: ECONOMICS AND BUSINESS ADMINISTRATION

SUB-SECTION: ECONOMICS

AMERICAN AND ITALIAN PERSPECTIVES ON PUBLIC AND PRIVATE EDUCATION CHOICES

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This work is based on the analysis of the public and private support to education and human capital development in two specific national contexts: the U.S. and Italy. Recent researches have firmly demonstrated the value of higher levels of education for socio-economic development, poverty reduction, higher incomes, employment and eliminating child labour, gender equality. The increased competition and globalization of economic activity, acceleration in technological and scientific knowledge, information revolution and more recently the worldwide economic recession continue to raise the value of education and training in preparing individuals for future employment, upgrading skills for greater workplace mobility, and underpinning wealth creation and economic development through human capital formation. The International Labour Organization (2010) has pointed out the key role played by higher levels of education and skills training in employment and social protection policies. In the Western world, the education industry is complex and diverse. It combines a dominant public sector of schools and universities and community colleges which educate the majority of students; a varied private sector mainly consists of nonprofit organizations that encompass some of the world's most elite education and scientific institutes. The importance of education for economic growth and development is well documented from a historical and economic standpoints. In this research we examine some evolving relationships between the marketplace, the state, and education institutions, knowing that the context of these relations has evolved strikingly in recent years, which have seen three major developments: a growing system differentiation, changing governance patterns, and a diminished direct involvement of governments in the funding and provision of education. Therefore, we are interested in understanding on one hand the possible evolution of the studied phenomenon, and on the other if the experience of a leading country as the U.S. may represent a useful starting point of imitation. So that, our analysis is focused on the investigation, through a period of ten years, of students enrollment according to the willingness to invest in education, independently of the resources needed. In particular, we use the Box-Jenkins methodology to fit data by using an ARIMA model and in order to achieve more information about the phenomenon. Our findings show a similar trend over time both for public and private enrollments although backgrounds and rules are very different in the two nations considered.

Keywords: human capital, public and private education, time series analysis.
JEL code: C23, E24, I25.

1. Introduction

Although not a pure public good, public provision of education is widely viewed as a primary function of government and it satisfies a natural commitment to the welfare of people. In many of developed countries public spending on education accounts for as much as 10% of government expenditures and as much as 5% of GNP. At the same time, the private sector of education has been growing in importance over the past decades, and public education has been commonly supplemented by private education, since there are few technical barriers to its private provision (Stiglitz 1974). The processes of education and training, by supporting the formation of human capital, acquire a meaningful relevance especially in the more advanced socio-economic contexts, such as those belong to EU or OECD. In our analysis we consider two advanced countries, the U.S. and Italy, which were both in the former G8 group. The aim is to recognize a similar path in choosing to invest in public or private education, mainly the higher one. We focus on college or university registration, trying to find a trend by which this economic point could be explained. The differences in scholastic achievement of public and private schools have been the topic of a large number of studies in the educational sciences, economics and sociology, mostly in the U.S. but also to some extent in Europe. Within this literature, a significant distinction emerges inside the private sector, namely between publicly financed and private independent schools (Godwin and Kemerer 2002).

2. Related literature and other resources

As a few other Western countries, the U.S. have a system of education and training which enables not only widespread knowledge and lifelong learning, but also the possibility to establish very advanced educational paths. This purpose is shared by central institutions and by peripheral ones, with obvious differences which can arise in a country with a typical federal character. This so highly competitive socio-economic context leads the national system to seek and use especially that part of the workforce with high efficiency. On the other side, Italy has the same American public purpose, but differently its centralized institutional structure denotes that the selection of goals only depends by central government, without any peripheral institution directly involved in development of human capital. So that it is necessary to examine the possible motives for households or individuals to choose a type of public or private education. Certainly, this choice covers issues related to the quality of educational institutions, which reflects better preparation for students, who gain more experience and skills in specific perspectives. These differences in educational systems should be stronger in countries where wider space is left to private, and the State chooses not to provide significant resources to public education. In a complex economic system such as that of the U.S. there are additional conditions in order to choose, and the study of choices is a separate field of scientific inquiry (*e.g.* Murnane *et al.* 1985, on the quality of schools in the U.S. and the differences for various ethnic groups). Focusing on the private school, Cheslock's work (2005) examines the share of transfers which constitute the total number of students in public and private schools, noting that the percentage for the latter is lower if compared to the other. This would not occur for less attractive institutions, but only for the most selective, and consequently the role of transfers become critical in the

U.S. higher education system. From such studies it is clear that both types of education require additional features, such as the selection, fees, and financial resources. This can also lead to transfers between different private institutions, more or less “selective”. However, over time there has been a quantitative advantage in terms of transfers to the public part, certainly influenced by the fact that there are more opportunities to enroll. There are also differences in autonomy, and consequences of selection decisions to human resources and programs, which of course has always been higher in the U.S., compared to the European experience. Before examining the influence of education on the future well-being of individuals, it is necessary to consider how, today, we can estimate a different level of quality for the various training courses. Certainly there is no a single method, and we can mention some of those who are close to our case studies. For the U.S. case, Cherchye *et al.* (2010) uses a nonparametric approach for the evaluation of public and private education. In fact, even in contexts where private education is widespread, public funds should still be used in an effective and useful way through education programs. Another approach is instead to test the results on the next level of education (see for example Horowitz and Spector 2005). In this work the authors in comparing students who attended public, private and religious schools, notice that they seem to get the best performance once in college. However, if it is possible to demonstrate the superiority of one of the possible better education, it should have general benefits, and therefore should be supported with public funds. In terms of benefits, there are also studies dedicated to estimating the contribution of public and private investment in education on economic growth. These include, for example, de la Croix and Doepke (2004), who estimate a greater contribution to the economic growth of private education when it is present in a low level of inequality in human capital, taking into account levels of fertility and the trade-off between quantity and cost of education of children. Finally, Arclean and Schiopu (2010) study the interaction between public and private spending in a two-stage education framework (K-12 and tertiary education) and their effects on economic growth. Obviously, economic theory highlights positively the contribution of specific investments, both public and private, when they support an increase in the average human capital. In this sense, in a balanced socio-economic system the public spending should encourage private investments, also understood as the costs of households for their children. For this reason, in a highly competitive and multifaceted system, as in a Western country, it is necessary to create a harmonious and mutual support among the various education levels, integrating where appropriate public and private institutions. This may happen for example when only a certain type of private institutions, having more autonomy, can create specific courses of study, identified as useful to the global national context.

3. Analysis and findings

Starting from U.S. Census Bureau and OECD databases concerning education, we find a ten years data, 1998-2008, related to registration in higher schools, divided into public and private institutions. According a time-series analysis, this could allow us to describe the behavior of institutions and people on choosing their type of investment in schooling. Preliminary, we consider a simple axiom, which we could summary as following: people in a moment of their life decide to spend money to assure themselves to pursue their educational path; this amount of money is given and the same is for the private and public

profiles, and people do not have benefits to acquire more education than the minimum required to enter in the workforce. At least, the only people problem is in which institution they want to learn. According to this statement, we follow the evolution of data, and at the end we try to predict them, according to the Box-Jenkins approach and applying an ARIMA model to find the best fits of a time-series to past values, and to make forecasts and verifying, where possible, if forecasts are closer to data. The method applied consists in an iterative three-stage modeling methodology:

- *model identification and model selection* making sure that the variables are stationary using plots of the autocorrelation and partial autocorrelation functions of the time-series to decide which, if any, autoregressive or moving average component should be used in the model;
- *parameter estimation* using computation algorithms to arrive at coefficients which best fit the selected ARIMA model, and we use the most common method of maximum likelihood estimation;
- *model checking* by testing whether the estimated model conforms to the specifications of a stationary univariate process, verifying that the residuals are independent of each other.

Moreover, in our analysis we consider four time-series with the same temporal scheduling and annually frequencies started in 1998 and ended in 2008, covering a period of ten years. In a first moment we can see, because the fact that economically the two countries are very similar, that the curve hits the value and it seems to have the same shape and underlying trend for the public institutions (see Fig. no. 1)

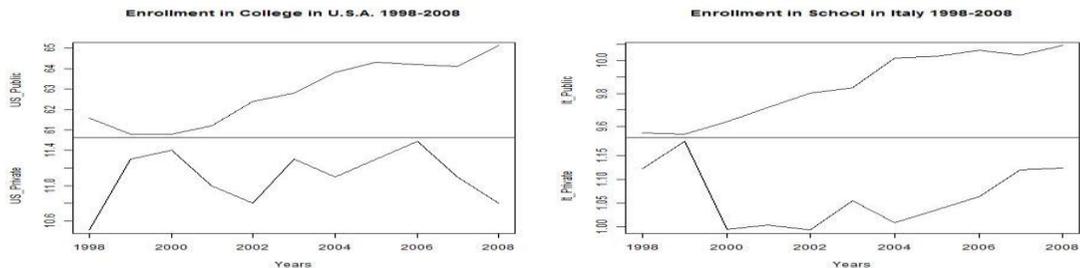


Figure no 1 - Enrollments (made by the authors)

Hence, we determine if the time-series is stationary and if there is any significant seasonality that needs to be modeled. As our time-series have annually frequency we are not able to have a significant seasonality to break up, so we can focus on stationarity which could be assessed from the sequence of plots above (see Fig. no. 1). We can also detect it from the autocorrelation plot, specifically, in our case, stationarity is indicated by an autocorrelation plot with a quick decay, as shown in the following figure. Indeed, for public institutions, both in the U.S. and Italy, the autocorrelation function decays after lag 3, while for private institution it takes place immediately after lag 2 (see Fig. no. 2).

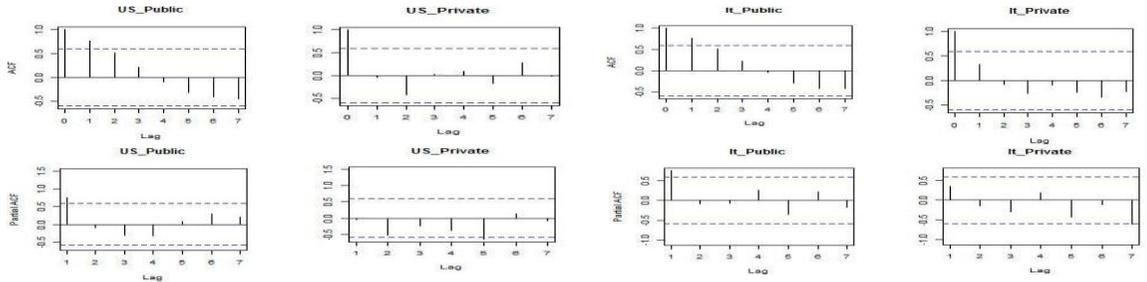


Figure no 2 - ACFs and PACFs (time series) made by the authors

The next step is to identify the order (p, d, q) of the autoregressive and moving average function and the order of the differences at which lag it will be computed. In practice, the autocorrelation and partial autocorrelation functions are random variables and sometimes will not give the same results as the theoretical functions. This could make the model identification more intricate, in particular, if we will find out a mixed models particularly difficult to identify. Thus, we already establish that our time-series are stationary, although the index of the partial autocorrelation function could suggest a cyclical period. We use statistical software R to determine that our time-series regarding the U.S. could be modeled by ARIMA process $(2,0,0)$ with non zero mean, while the others two regarding Italy could be modeled by ARIMA $(1,0,0)$ with non zero mean, supported in our choice by information-based criteria Akaike Information Criterion (AIC), technique that could help in the process of identification of the model. This model could be summarized by the following table (Table no 1):

Table no 1 - ARIMA coefficients

	AR(1)	AR(2)	Intercept	Est. σ^2	Log-ML	AIC
U.S. Public	1.4499	-0.6016	63.4474	0.3165	-10.59	29.17
U.S. Private	-0.0789	-0.6865	11.1334	0.05091	0.13	7.74
IT Public	0.9485		9.8296	0.005956	11.42	-16.84
IT Private	0.3655		1.0695	0.003185	15.94	-25.88

made by the authors

The model diagnostic is similar to the validation for non-linear least squares fitting, where the error terms are assumed to follow the assumptions for a stationary univariate process. The residuals should be white noise drawings from a fixed distribution with a constant mean and variance. If the Box–Jenkins model is a good model for the data, the residuals should satisfy these assumptions. The plot of the mean and variance of residuals analyzed over time and that of autocorrelation of residuals help us to identify to select the model. As in the plot (see Fig. no. 3), our data assure the respect of those assumptions so the model is checked and validated.

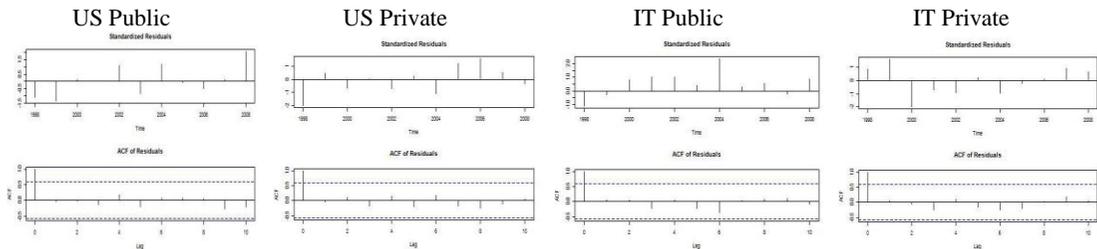
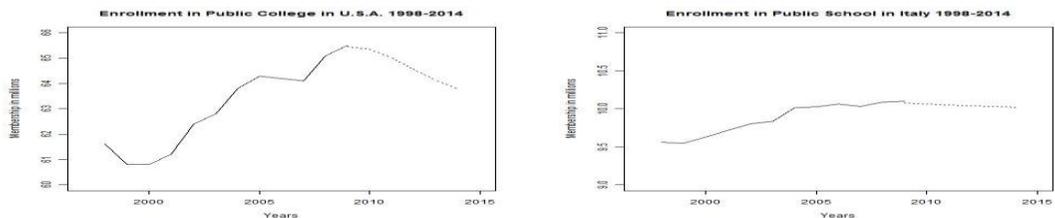


Figure no 3 - Residuals of the model (made by the authors)

After those steps, our model is checked, and it fits well the data since well itemized, so that we can use it to forecast the global behavior of enrollments. In the graphics below (see Fig. no. 4), we can observe that the forecast about American enrollments in public college decays slowly describing an exponential decreasing curve, while the forecast for private college is more erratic and not easily to interpreter. This lack of a continuous and increasing curve may be attributed to a casual elements, different from statistical errors, which affect the total amount independently from the householders’ decision. Forecasts for Italy show a quite stationary values, indicating that decisions to enroll at schools do not suffer unintended effects due to critical situation and the level of enrolments, therefore, are stable over time with unimportant, compared to past, fluctuations in the levels.



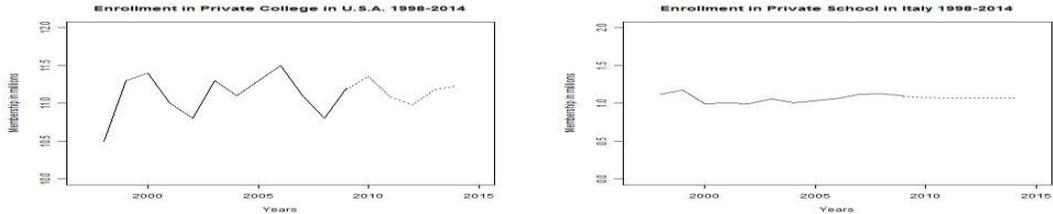


Figure no 4 - Forecasts (made by the authors)

4. Conclusive remarks

This paper show empirically the increasing importance that public and private education assume in two socio-economic systems. In particular, our research is focused in comparison with two countries, the U.S. and Italy, which differ for many things such as the choices of public and private investments, the population, the national financial debt and government expenditures. The preliminary analysis of the curve of enrolments at public school shows a similarity between the U.S. and Italy in their shapes, but not in the values of the curves, while we cannot reflect the same for private schools. This could be interpreted as a proportional ratio in government expenditure in education or, as we believe, in the preference of public education system *coeteris paribus*. Nevertheless, the proportionality of the expenditure is only a quantitative representation. Actually, the reasons for the apparent contradictions should be required in the existence of at least two different views, in many ways divergent, about the ideological role of the university, and more generally education, in those countries. In the U.S., education organization is considered a private investment than an individual or his family voluntarily support, if can afford it, to be capitalize as a result by means of the major income received. In this country, a request for a private education responds also a private offer, where even the public schools and universities operate, with the private ones, in a market logic. Hence, this logic leads to a sort of competition between institutions to be seen as the most suitable not for the quality of education provided but only for the value which people received by attending one noticeable college rather than an unknown one. This kind of competition is carried on only by institutions which have the opportunity, or in most cases the resources, to attract famous professors, researchers or benefactors. Otherwise, in Italy, education is still ensured by national Constitution and it is seen as a right by citizens, often with a financial aid provided by government. This gives rise to a misunderstanding about higher education institutions, so that people do not perceive the need for attending a private schools instead of public one. In conclusion, while data shows a closer paragon between the U.S. and Italy, the realistic representation is far from it. Indeed, the U.S. education becomes a real commodity and it is forced to follow market rules, whereas in Italy it is still a right and our goal is reached and it could be summarized as follow: people choose always the quality, *coeteris paribus*.

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HUMAN CAPITAL AND DEVELOPMENT: SOME EVIDENCE FROM EASTERN EUROPE

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The concept of development is not only referred to the level or to the growth rate of GDP of a country, but it concerns different aspects of individual life. Development leads to a changing of values, behaviours and attitudes of people interested in it and in the well-being of the whole society.

Since the second part of the last century, more and more economists always assert that human capital is a fundamental asset to promote economic growth and development. Health and education are the two principal ingredients of human capital. There is a strong positive bidirectional relationship between education and health; in fact, it is statistically supported that the two variables move together, so healthy people are more likely to achieve an higher level of education rather than sick people and, vice-versa, more educated people are more likely to enjoy good health status. This generates a virtuous cycle that can lead to greater development. Indeed, health increases people's capabilities allowing achievement in their well-beings, since healthy people can work longer and with higher productivity than poor health people. For this reason individuals' income rises allowing them major choices in terms of consumption, savings and investments. Considering the economic benefits that start from health and education, not only at microeconomic level but also for a country, it is important to pay attention to the role of this two variables in the economic development process. There are several channels through which health and education can be associated with better enhancement in economic results. They can be find in the labour market and in the participation in the labour market; worker productivity; human capital investments; saving capacity; availability of save to invest in physical and intellectual capital; fertility choices and structure of population.

The present paper analyzes the two-way linkage between education and health and their relationship with economic development identifying the conditions of some Eastern European countries. The methodology through which the results are obtained is the multidimensional scaling method which allows to define relations between countries in terms of proximity/distance with respect to the considered indicators, providing a spatial representation of them.

Keywords: human capital, education, health, economic development, multidimensional scaling.

1. Introduction

Increasing attention is been paid by researchers to the discussion on what are the principal determinants of economic growth but first of all on what are the most important drivers to achieve a growing level of development.

There are two different approaches to development. On one hand there is the income-centered approach that asserts that investments in human capital, including health and education, have to be promoted if the rate of return of the investment exceeds the capital cost. On the other hand there is the capabilities approach (Sen: 1999) that argues that the enhancements of people's ability to read and write, or to be well-nourished and healthy, have to be encouraged even if the conventionally measured economic return to investment in literacy, or improved food intake and health care, is zero (Anand and Ravallion: 1993). This second approach is supported by the greater part of the literature on economic development that claims that investments in human capital are the main instrument to promote it. This evidence is concentrates on the role of health and education, and especially on the strong two-way link that occurs between this two determinants of human capital and why it is so important for development.

The major objective of this work is to examine the existence of relations among indicators of economic development, education and health in some Eastern European countries, with the aim of producing a clustering of them in terms of proximity/distance with respect to the examined indicators. The paper starts with a brief overview of the relevant literature on the topic of human capital and economic development (see par. 2). In the second section, it is provided a data analysis using a Multidimensional Scaling methodology, in order to identify groups of countries that show similar characteristics in relation to the chosen indicators (see par. 3). At the end, some brief concluding remarks, that summarize the results achieved by the analysis, are given (see par. 4).

2. Literature overview

The interest of economists towards non-economic dimensions of economic growth (such as education and health) becomes strong since the Sixties of the last century, when some researchers have noticed, contrary to what they believed, that economic growth was not only dependent on economic and quantitative factors, but it was also due to more complex and intangible factors, the first of which is human capital. As a form of human capital, health is increasingly considered as the driver of economic growth, of development and poverty reduction. Health is defined more generally as the income that can be received if you have the ability to employ your time at work rather than in care in case of illness. Grossman (1972) claims that health is viewed not only as a consumer good but also as an investment good and for this reason an investment in human capital and an output of household production processes. In fact, Grossman, who provided the first formal contribution to the objective study of the determinants of individual health status, argues that it is possible to observe a positive relationship between education and health; in particular, he supports the explanation of the link between education and health which claims that education has a

positive impact on the likelihood of enjoying a good health because it increases the production of health technology, altering both productive efficiency and allocative efficiency. In addition, more educated people are more awareness in terms of adopting prudent use of medical care, healthy responsible behaviours and conscience in the choice of work. In the same way, people that enjoy good health conditions are more interested to invest in education because they have greater cognitive capabilities that allow them to achieve good results. Furthermore, they have more time to spend in study rather than in care in case of illness. So, more educated people have great probability to have a good health status and to be more productive contributing to economic development of one nation.

The importance of education and health for the economic growth and development is due to the returns from investments in the two variables. These are two forms of human capital, the improvement of which should enhance worker's productivity. Several studies show that better health, special early in life, is associated with higher educational attainment. Conti et al. (2010) argue that more educated individuals, in turn, have better health later in life and better market prospects. According to the authors, education has an important causal effect in explaining differences in many adult outcomes and health behaviours (Conti, Heckman and Urzua: 2010).

An improvement of living conditions of an individual, and therefore an increase in the level of health, has effects both at a microeconomic level, thereby improving his welfare and that of the communities in which he lives, and also at a macroeconomic level, allowing a further development of a country. The micro-level evidences are those that support the contribution of health on economic outcomes, like as wages and earnings, amount of hours worked, labour force participation and so on, analyzing for example the link between nutrition and productivity. Fogel (1997), in his analysis on distribution of the height and weight and on food supply and calorie intake across the population in Great Britain and France, estimates that improvements in health and nutrition contribute to about one-third of income growth in Great Britain between 1790 and 1980. The macro evidences concern the effect of population health on economic growth. However, the effects are different and they depend on the initial level of income. For example, Bhargava et al. (2001) believe that a better health is more important for wages, economic indicator of workers' productivity, in low-income countries than in high income ones. Indeed, in low and middle income countries a 1% increase in survival rate in adulthood is positively associated with the increase of 0.05% in the rate of economic growth, while above a certain income the adult survival rate has a negligible effect and in some cases a negative growth rate. Also Weil (2007) suggests that the positive effect of health on GDP is stronger among poor countries.

3. Data, methodology and results

To reach our purpose, which consists in identifying conditions of some Eastern European countries with respect to economic development, health and education, in testing the existence of correlations between the different aspects and in providing a classification of countries, we use the multidimensional scaling method.

Multidimensional scaling is a useful tool through which it is possible to produce a graphical representation of a pattern of objects, in this case the twelve Eastern European countries, based on the degree of similarity/dissimilarity between them.

The goal is to provide a representative map that best approximates the distances observed between countries, concerning economic development, health and education.

This statistical method attempts to build a configuration of the various entities, merged in a small number of dimensions. This is done by defining relations between countries in terms of proximity/distance with respect to the considered indicators. The resulting positioning map has the property to partition the countries into homogeneous groups, so as that the degree of association between two countries is maximal if they belong to the same group and minimal otherwise.

We considered a matrix of twelve Eastern European countries and nine indicators, representing three sets of variables: economic development, education and health. In particular, we have selected three indicators for each topic (Table no 1).

Data refer to the most recent period of five years for which we can find available data; specifically, the considered period usually runs from 2005 to 2009. In the analysis, we use the average value of each indicator over the considered period for each country (Table no 1).

Table 1. Data set

	GDP per capita (current US\$) (a)	Exports of goods and services (% of GDP) (a)	Unemployment (% of total labor force) (a)	Public spending on education (% of government expenditure) (b)	Pupil-teacher ratio, primary (c)	School enrollment, tertiary (% gross) (c)	Health expenditure (% of GDP) (a)	Life expectancy at birth (years) (a)	Mortality rate, infant (per 1000 live births) (a)
Bulgaria	5353,2	53,5	7,7	9,3	16,1	46,2	7,0	72,8	9,7
Cyprus	27480,2	47,6	4,6	13,4	16,4	36,3	6,1	79,6	3,6
Czech Republic	16356,2	75,1	6,3	9,9	17,1	50,8	7,1	76,6	3,1
Estonia	14081,0	75,4	7,5	14,7	11,9	65,0	5,7	73,3	5,0
Hungary	12843,9	76,2	8,0	11,0	10,3	64,4	7,7	73,3	5,7
Latvia	10975,5	43,8	9,3	14,2	12,0	72,8	6,3	71,7	7,7
Lithuania	10645,7	57,7	7,5	14,8	13,7	75,8	6,3	71,6	5,9
Malta	17758,8	82,5	6,7	12,7	13,6	30,7	7,8	79,4	5,8
Poland	10641,8	39,4	11,3	12,1	10,8	65,5	6,6	75,3	6,0
Romania	6981,8	31,5	6,7	11,5	16,7	52,3	5,3	72,5	12,6
Slovak Republic	14836,1	86,0	12,4	10,6	16,9	44,9	7,7	74,4	6,3
Slovenia	22272,4	65,0	5,5	12,6	16,1	81,4	8,4	78,4	2,9

Source: World Bank. (a) Average values refer to the period from 2005 to 2009. (b) Average values refer to the period from 2003 to 2007. (c) Average values refer to the period from 2004 to 2008.

The model's goodness of fit was assessed via the RSQ (0.89), that indicates the proportion of variability explained by the corresponding dissimilarity distances, and the Stress Index (0.14). As a general rule, results are found to be robust when the size k achieves an Stress Index value lower than 0,15. A two-dimensional model was judged to be acceptable according to the values of the Stress Index. Further investigation provided additional basis for choosing the two-dimensional solution: the "elbow" rule suggests to choose the number of dimensions in correspondence to where the diagram yields an "elbow", beyond which the broken line flattens (Fig. no 1).

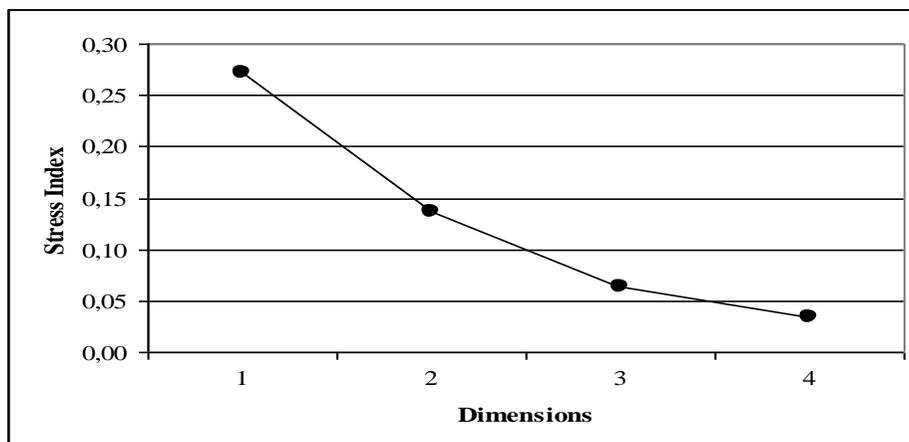


Figure 1. Scree plot

The correlations between dimensions and variables (Table no 2) were useful for naming the axes. The resulting two-dimensional image is shown in Fig. no 2. The horizontal axis represents the variables concerning economic and health indicators (so named Human Development); the vertical one is related to education indicators (so named Education Development).

Table 2. Correlations between variables and dimensions

Variables	Dimension 1	Dimension 2
GDP per capita (current US\$)	0,89	
Exports of goods and services (% of GDP)	0,54	
Unemployment (% of total labor force)		
Public spending on education (% of government expenditure)		0,85
Pupil-teacher ratio, primary		-0,63
School enrolment, tertiary (% gross)		0,50
Health expenditure (% of GDP)	0,63	
Life expectancy at birth, total (years)	0,90	
Mortality rate, infant (per 1000 live births)	-0,78	

Through the multidimensional scaling method we summarize the nine considered indicators by only two dimensions. Specifically, in such a way we are able to obtain a graphical representation of the twelve Eastern European countries object of study, based on the degree of similarity/dissimilarity between them with respect to the value that they assume for the two considered dimensions. Countries are classified into different groups, which are more homogeneous into them and more heterogeneous among them (Fig. no 2).

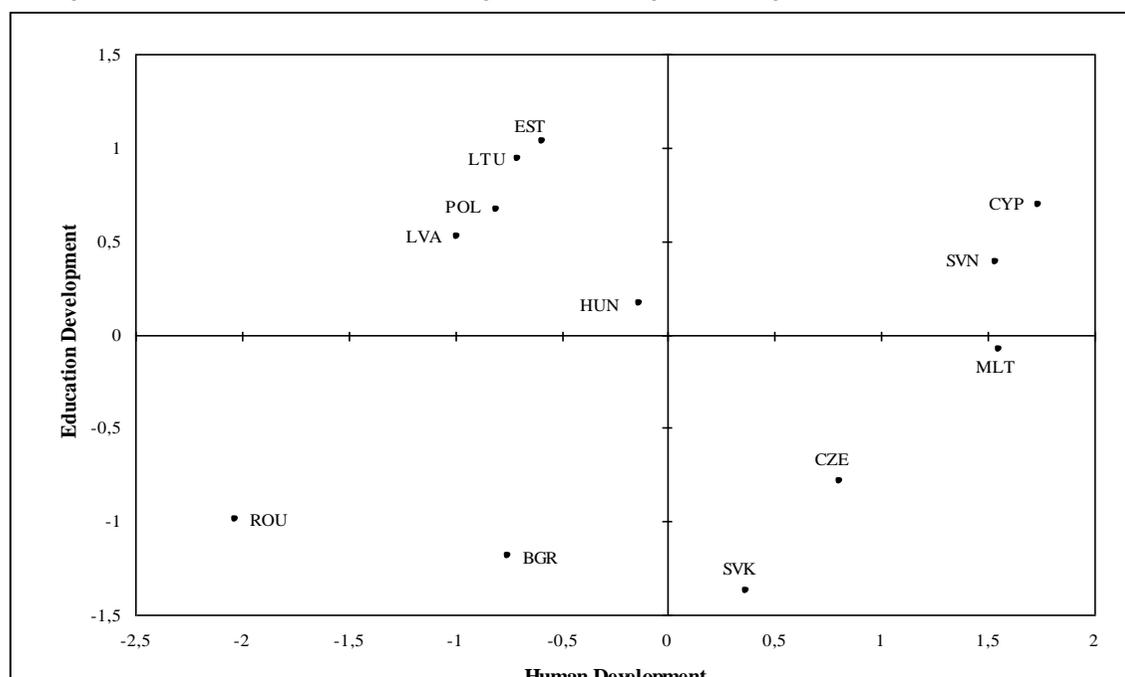


Figure 2. Cluster of countries in a two-dimensional space

Exactly, looking at Fig. no 2, we can see that countries that show a better status related to education, health and economic condition are positioned in the first quadrant (Slovenia and Cyprus). Countries that are located in the third quadrant are those having a lower level of education, health and economic condition (Romania and Bulgaria).

The Baltic Countries, Poland and Hungary show satisfactory level of educational development, but low levels of human development. Finally, Czech Republic and Slovak Republic show relatively high level of human development, but low level with respect to the educational indicators.

4. Conclusions

Human capital is one of the most discussed topics in economics. The initial hypothesis that moves the aim of the present paper is that the two principal components of human capital, education and health, have a positive impact on economic growth and development. Therefore, in this preliminary analysis on some Eastern European countries, we adopt the multidimensional scaling method that allows us to summarize the nine indicators about the levels of education, health and economic conditions in only two dimensions that we named Education Development and Human Development. In such a way, we have made an attempt to identify how the chosen Eastern European countries are positioned with respect to the two important dimensions. The results suggest a partition of countries in four clear groups, across which particularly Slovenia and Cyprus could be identified as benchmark for the others. It is important to underline that this analysis represents a preliminary analysis and it needs further examinations.

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COMPETITIVENESS - GROWTH FACTOR. POINT OF VIEW ON THE SITUATION IN ROMANIA

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This paper considers the issue of competitiveness of national economy, making specific reference to the economic situation of Romania in the year 2010.

The diversity of views on approaches to competitiveness in the literature requires consultation of reports prepared by prestigious international forums and organizations, using relevant indicators and economic variables.

Keywords: Competitiveness, economic growth, productivity, economic environment, economic efficiency.

JEL Codes: F43, O47

1. Introduction

Competitiveness means the way in which nations and the economic environment given all powers to achieve its prosperity.

Competitiveness study allows "the possibility of comparing the performance achieved, and future growth potential" (Spataru) of the company and the economic environment.

Analyzing the structure and dynamics of the competitive system is also an element of absolute completion of analysis and relevant government decisions targeting companies involved in production activity (Airoldi, Brunetti and Coda in 2005: 322), all aimed at raising environmental performance national economy.

In economics, competitiveness is identified as the main active element in the procurement and delivery performance during the competition, the organization the role of 'the situation is in better position as compared to its competitor for the "defeat" for the purposes of reporting gave a performance criterion and followed by all competitors (Voiculescu 2001: 6).

2. Defining the level of competitiveness based approach

The concept can be approached at monoeconomic, macroeconomic and microeconomic level. In that respect this industry experts opinions on the definition depending on the level of approach:

- "Global competitiveness is a matter of economics that analyzes the facts and policies that shape a nation's ability to create and maintain an environment conducive to supporting and

achieving better value for their enterprises and prosperity of its people"(World Competitiveness Yearbook).

- "Competitiveness is defined as that set of factors, policies and institutions that determine the current level of productivity of a country. Productivity determines both the welfare of an economy at a time, and its growth potential in the future. Empirical research has shown that developing a knowledge-based economy is one of the key factors enhancing the competitiveness of an economy"(Imbrescu and Băbăiță).

- "The competitiveness of markets, refers to the degree to which individual firms have the power to influence market prices or terms on which their product is sold. The individual firm has less power to influence the market on selling their product, the more competitive is the market" (Lipsei and Chrystal 1999: 252).

- "The level at which it generates is the microeconomic competitiveness. A country becomes competitive when you manage to build that environment that allows each company to become effective added value, to be able to survive or develop in any national economic environment, especially internationally. The level at which it maintains and strengthens the competitiveness of the macro. The country maintains or improves its profitability internationally when it decides to apply the set of economic policies necessary to stimulate the achieving optimum expansion at the micro level"(Spataru).

Creating a competitive system is an important issue and a policy of "Washington Consensus" for economic growth in developing states (Baumol, Litan and Schramm 2009: 52).

Representation of the competitive system, the example of a competitive economic market can be achieved only by extensive competition model representation. Competitive system structure: the competition extended) is a necessary condition of existence and developing a real competitive.

The four pillars of the macroeconomic level the competitive system are newcomers (especially entrepreneurs), customers (consumers), suppliers and manufacturers of goods substitutable (those who have the ability to conduct marketing pressures).

If new entrants can affect competition by larger volumes of production and reducing unit costs through a variety of products, manufacturers of substitutable products or services will be the source of uncertainty for new entrants if the price / benefit will be one of those consumers' expectations accordingly have propensities for such goods.

Providers will become competitive in particular by focusing on service quality and price of services and clients, through negotiation and price elasticity will be the most important word to say.

The competitiveness suggests safety, efficiency, quality, high productivity, adaptability, successful, modern management, superior products, low cost.

In the battle for new markets, firms need to emphasize their strengths to gain the ground to competitors. Also they have to defend these benefits, known and recognized by constant efforts and also to know and accept that are the strengths of its competitors. At the same time, significantly increase the interest and effort to obtain business benefits both the domestic and international market.

Competitive or competitive ability is just that part on which power and economic strength of the economic conditions of a market economy. Therefore, development of competitiveness, acquiring and maintaining competitive advantage and effective use of the factors influencing it, is the main goal toward which all economic agents.

3. Implications of competitive markets in the growth states

The contemporary world has undergone a series of connections between markets and increasing competitiveness of the country's economic performance in the economic environment runs its business. In this respect shows experts in the field: "To be effective, must include an economic and profitable business based on competitive (...) the true economic substance produced by them, their profitability depends on economic strength and level to live the great country"(Verboncu and Zalman 2005:41).

The competitiveness of a country is assessed by its capacity (Gavrila 2009: 131):

- to export
- to attract FDI
- to harness resources and increase real per capita GDP
- prices were more positive than those of competitors, the offer is characterized by quality, diversity and timeliness

A national economy is competitive in the long term, they ensure the sustainable increase of welfare and population dynamics due to the high overall productivity of factors of production.

It is clear that the competitiveness of an economy depends decisively on the business environment, businesses are the engine of economic growth. Improve business access to factors of their participation in the European Single Market, investment in optimizing their industrial base, while respecting the principles of sustainable development is a critical prerequisite for the operation of the Romanian economy competitive.

As described by Michael Porter in the latest edition (2008) of his famous works, "About the competition, the competitiveness of a country do not relate primarily to macroeconomic stability, neither labor nor public policies, or practices management, but especially in productivity. A nation is competitive when it allows the development of the determinants of productivity and increasing productivity.

Depending on factors contributing to productivity, the report prepared by the World Economic Forum identified three stages in which the countries, namely:

Stage I: The competitiveness of production due to factors - factor - driven (force of unskilled or poorly qualified natural resources). The economy is particularly competitive because of lower prices, but the products are less complex. However, assuming the presence of certain basic conditions are essential (institutions, infrastructure, macroeconomics, health and primary education).

Stage II: Competitiveness by factors of efficiency - efficiency - driven (production more efficient, better quality products). Competitive conditions related to higher education and continuous training and ability to benefit from existing technologies.

Stage III: The competitiveness based on innovation - innovation-driven (new products from innovative, complex production processes).

The importance of individual factors, expressed by weight in the total contribution of the three pillars of competitiveness depends on the stage in which the country concerned.

Table 1 The pillars of competitiveness (on a scale from 1 a worst - 7 the most powerful)

Basic requirements	Score Romania
Institutions	3,7

Infrastructure	2,7
Macroeconomic stability	4,6
Health and primary education	5,5
Efficiency enhancers	
Higher education and training	4,3
Goods market efficiency	4,2
Labor market efficiency	4,3
Financial market sophistication	4,4
Technological readiness	3,8
Market size	4,5
Innovation and sophistication factors	
Business sophistication	3,8
Innovation	3,1

Source: World Economic Forum Global Competitiveness Report 2009-2010

4. Romania's place in terms of competitiveness in 2010?

According to the Romanian Institute for Social and Economic Research Polls - IRECSO, Romania is one of the last places among the 58 states, namely the 54th place, ahead of Argentina, Croatia, Ukraine and Venezuela. In front of us, at very short distance are Bulgaria (who score a 0.6% higher than the score of Romania) and Slovenia which has a spacing of 1.2 points from November. In the case of former communist countries until 1989 before we can see that under the current economic crisis, Hungary (42), Estonia (34) and Poland (32) have found solutions to increase competitiveness, Romania (54) and Czech Republic (29) retain their positions from 2009 to 2010, while Bulgaria (53), Slovenia (52), Slovakia (49) and Lithuania (43) have recorded substantial decreases ranging from 20 to 12 seats. For a better building on evolution, that the positions occupied in recent years, the Yearbook presents individual country specific contributory factors in terms of competitiveness and the disadvantaged.

In 2010 Romania registered a decline in economic performance, ranked 32 in 2009, ranked 47 in 2010. Although this chapter we have seen a drop of 15 seats still remain before countries like Greece (48), Russia (49), Turkey (50), Estonia (52), Slovakia (54), Ukraine (55) Lithuania (57). Regarding the efficiency of government, I dropped one place from 2009, topped 50. Regarding infrastructure, I grew up 10 seats in 2010 compared to 2009, peaking at number 43 in 2010, and Chapter Efficiency business, grew 13 seats, up from 56 in 2009 ranked the 49th place in 2010.

Unfortunately, Romania has made significant gains in terms of business efficiency and infrastructure were not enough to increase competitiveness as a whole, but given that the economic performance and efficiency of government Chapter I declined, maintaining the position of Romania in 2010, to 2009 levels is due the first two factors. Credit business is beginning to strengthen in recent years and investment in telecommunications infrastructure and in research are beginning to become visible, helping them to contribute in 2010 to maintain the competitiveness of Romania in 2009, the economic crisis.

Strengths of the business concerns in particular the progress made by the Romanian companies in their concern for customer satisfaction for a proper wage service sector, and staff management positions, at a salary that is comparable to that in other EU countries. However, to further strengthen the business environment we need to improve some aspects which for 2010 is still the weak points in terms of competitiveness, namely: the need for specialists in finance raised by the need to increase the capacity of Romanian companies' adaptability to market changes the need to increase transparency of financial institutions in Romania, the stock market decline, and finding solutions so enterprise debts not restrict their ability to be competitive.

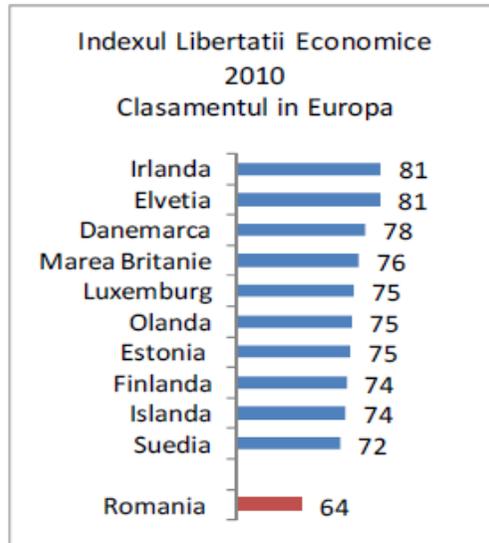
Negative aspects (aspects of which Romania is ranked the lowest in the context of global competitiveness) in terms of economic performance are related to direct investment abroad, investments in capital markets abroad, receipts from tourism and real GDP growth.

Even though the Chapter Efficiency sit well in the government's total public debt and collect taxes on income, weaknesses in the system in terms of competitiveness in 2010 relate mostly to the lack of public contracts open to all bidders, the black market economy that does not allow and competition law can not stop unfair competition.

In conclusion, overall, we assess the competitiveness of Romanian economy as a "disappointing performance." In many ways they are signs of competitiveness,

competitiveness appears other way to start, but in most economic indicators speak for lags, lack of competitiveness.

Heritage Foundation and Wall Street Journal Index of Economic Freedom determines (S), assuming that economic freedom is a precondition for prosperity of individuals and in turn a key driver for competitiveness.



Source: *Index of Economic Freedom, Heritage Foundation, 2010*

Chart no. 1 Rating States of Europe according to ILE

According to the results of this study, the 2010 edition, Romania is the 63rd country in the world in terms of economic freedom, and ranked 28th in Europe.

The Heritage analysis, Romania has achieved a 64.2 index points above the global average. After comparing the first countries in Europe, according to each indicator of economic freedom, Romania has high scores for: free trade, fiscal freedom, government spending, and significantly lower scores than the best countries in Europe obtained if : property rights and freedom from corruption, as these areas are necessary for developing solutions.

Results of the study conducted by the Heritage Foundation shows that Romania's economy is moving towards a greater economic freedom index.

5. Conclusions

For Romania, economic competitiveness is a major component of national development strategy for 2007-2013. For this purpose a special program was developed (Sectoral Operational Programme 'Increasing of Economic Competitiveness 'SOP) in accordance with the Lisbon strategy on improving the economic competitiveness of the European Union.

In full accordance with the conduct of the Commission's proposals for Competitiveness and Innovation Framework 2007-2013, the priorities of Romania's competitiveness strategy, which take into account and take into account the guidelines proposed by the Commission for Cohesion Policy 2007 – 2013, are:

- Improving access to emergency market, capital, technology businesses, especially small and medium enterprises;
- Developing knowledge-based economy: including the promotion of innovation and development of a competitive;
- Improve energy efficiency and use renewable energy.

Competitiveness, although often studied in recent decades even in Romania, remains a qualitative concept, draw conclusions on the competitive status is rather the depth of analysis, the information behind it, the evaluator's experience and, not least, points of view that makes analysis.

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TENDINȚE MACROECONOMICE ALE TAXELOR DE MEDIU ÎN ROMÂNIA, COMPARATIV CU ȚĂRILE MEMBRE ALE UE-27

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Reforms of environmental taxes in EU member states began to consolidate a strategic conceptual basis since the early '90s, when it was launched the idea of changing the tax burden from the tax factor of production, work to the environmental factors and use of environmental unfriendly activities and goods. The theoretical support of this view is represented by the corrective taxes Pigou situation justifying the optimal level of activity of producing goods and services from a social perspective, the collection of taxes imposed by the state of polluters, depending on the amount of damage and damage to third parties, the principle of "polluter pays". Despite the green fees start reforms of the EU member countries and their levels are not increased in recent years as a share of GDP. In the EU-27, 2008, revenues from environmental taxes represented a rate of about 2.8% of GDP and 6.1% of total revenues compared to 2.9% and 7.0% record share of GDP in 1999.

Effects of environmental taxes on eco-efficiency must be seen not only in terms of their size or budget as income tax to GDP ratio, but also as a positive economic and social impact generated by larger beneficial effects of reducing pollution and preserving the quality natural resources and environmental factors.

Keywords: environmental taxes, eco-efficiency, green fees, corrective taxes Pigou.
JEL Classification codes: Q5

În pofida dificultăților de identificare și măsurare a externalităților negative, un astfel de curent de gândire capătă un suport în creștere continuă alimentat de agravarea efectelor schimbării de climă.

Elaborată în anul 1993, sub egida lui Jacques Delors, Carta Albă privind Creșterea, Competitivitatea și Ocuparea a UE, relevă necesitatea reformei fiscale în țările membre ca o opțiune politică atractivă pentru factorii de decizie din acea vreme, tocmai în ideea că o astfel de reformă ar sprijini creșterea, ocuparea și competitivitatea în țările respective prin asigurarea unei mai bune calități și practici a capitalului natural, în consens cu cerințele dezvoltării durabile. O serie de țări între care Danemarca, Finlanda, Germania, Olanda și Anglia, au inițiat în ultimul deceniu, elemente de reformare a taxelor verzi, măbind nivelul taxelor de mediu și utilizând venituri din taxe adiționale pentru a finanța reducerea fiscalității asupra veniturilor personale și muncii, cu scopul transparent declarat de a favoriza creșterea gradului de ocupare a forței de muncă. În paralel, țările respective au întreprins o serie de acțiuni cum ar fi reducerea ratelor de impozitare sau schemele de refinanțare în scopul protejării producătorilor de efectele negative asupra competitivității generate de mărirea costurilor input-urilor. O politică similară a fost urmată și de către țările noi membre ale UE (Slovenia) unde taxa asupra CO₂ se aplică încă din anul 1997 la toate produsele consumatoare de energie. Republica Cehă a demarat reforma taxelor verzi, începând cu anul 2008, în sensul creșterii acestora pentru cea mai mare parte a produselor

energointensive, în perioada 2008-2012, veniturile încasate din taxele respective fiind utilizate pentru sprijinirea politicilor publice de ocupare a forței de muncă.

Dar, în pofida demarării reformelor taxelor verzi în țările membre ale UE, nivelul acestora nu a crescut în ultimii ani ca pondere în PIB. La nivelul UE-27, în anul 2008, veniturile din taxele de mediu au reprezentat o proporție de circa 2,8% față de PIB și 6,1% din volumul total al veniturilor față de 2,9% și respectiv 7,0% pondere în PIB în anul record 1999 (vezi tabel 2). Tendința permanentă de scădere a ponderii veniturilor din taxele de mediu începând cu anul 2004, s-a produs practic în marea majoritate a țărilor membre ale UE, între aceste țări existând diferențe sensibile. Astfel, începând cu anul 1995 se constată o tendință de creștere în Danemarca, Estonia, Letonia, Lituania, Olanda, Austria, Polonia și Slovacia, în timp ce în restul țărilor se constată o quasiconstanță sau scădere a mărimii indicatorului.

1.1. Veniturile din taxele de mediu, nivel și tendințe în România, comparativ cu țările membre UE-27

Volumul valoric al taxelor de mediu analizat pentru perioada 1995-2008 în scopul de a pune în evidență particularitățile, nivelul și dinamica fiscalității de mediu, pe termenul scurt, mediu și lung.

Tabelul nr.1. Analiza comparativă a nivelului mediu^{x)} al proporției taxelor de mediu față de PIB, în România și țările membre ale UE, pe subperioadele 1995-2000, 2001-2006 și 2007-2008

	Subperioadele			(%)
	1995-2000	2001-2006	2007-2008	
România	2,9	2,2	1,95	
UE-27	2,9	2,8	2,65	
UE-25	2,9	2,8	2,65	
UE-16 Zona Euro	2,95	2,76	2,55	

x) media veniturilor

Sursa: calcule proprii pe baza datelor EUROSTAT

La nivelul UE-27, tendința de scădere a ponderii veniturilor din taxele de mediu a fost imprimată de țările cu pondere importantă în economia comunitară, cum sunt Franța, Italia, Anglia.

Creșterea mărimii indicatorului în noile țări membre ale UE în mare măsură a fost generată de cerințele procesului de aderare la UE, chiar dacă unele s-au folosit de ocazie pentru a mări nivelurile taxelor la energie, peste prevederile comunitare.

În țările membre ale UE, taxele de poluare sunt percepute pe unitate de consum fizic și în mod obișnuit se stabilesc în termeni nominali, ceea ce și explică declinul relativ al acestora în ultima parte a perioadei analizate.

Spre deosebire de taxele *ad-valorem*, taxele de mediu pe unitate fizică de consum, ca procent din PIB, au manifestat tendința de scădere, fără a fi ajustate cu rata inflației sau mărite cu regularitate, la diferite intervale de timp.

Principalele motive ale erodării valorii reale a taxelor de mediu au fost:

- cererea de energie a avut tendința de a crește mai lent decât venitul, ceea ce presupune o scădere a ponderii taxelor plătite pentru energie atunci când economia se află în proces de creștere;

- creșterea taxelor de energie, în ultimii ani, a condus probabil la reducerea consumului de energie, ceea ce, pe cale de consecință, a erodat baza de impozitare a energiei, chiar dacă nu s-a înregistrat o reducere a cheltuielilor pentru energie;

- guvernele nu s-au arătat dispuse să mărească în mod constant mărimea taxelor la produse care afectează costurile de energie ale menajelor și industriilor.

În perioada 1992-2004, ratele minime ale UE la uleiurile minerale au fost menținute constante, până când a intrat în vigoare Directiva Taxei pe Energie – Energy Tax Directive (2003/96/EC), astfel că nu au existat motive de mărire a taxelor verzi.

Pe de altă parte, creșterea atractivă pentru comercializarea permiselor de poluare și prețurile înalte la petrol în primii ani ai anilor 2000 a reprezentat un alt factor care a condus la inapetența unor taxe suplimentare de mediu mai ales în ceea ce privește energia.

În ceea ce privește România, datele din tabelul nr.2 evidențiază următoarele tendințe:

- nivelurile veniturilor din taxele de mediu ca procent față de PIB până în anul 1996 a fost mai mic în comparație cu media UE-27;

- a înregistrat o creștere în perioada 1997-2000, după care a înregistrat o tendință de scădere continuă în perioada 2001-2008;

- în anul 2008, România înregistra una din cele mai reduse ponderi în PIB ale taxelor de mediu, 1,8% față de 5,7% în Danemarca, 3,9% în Olanda și 2,7% în Finlanda;

- mărimea anuală a proporției veniturilor din taxele de mediu față de PIB a fost mai oscilantă în România comparativ cu alte țări membre ale UE.

1.2. Structura taxelor de mediu

Cea mai mare parte a taxelor de mediu provin din domeniul energiei (1,4% din totalul de 1,8% în anul 2008, în special din taxarea combustibilului folosit de ramura transporturi 1,1%). Restul provin din impozitarea transportului (mai puțin a celui bazat pe combustibil) ca și din taxe de poluare sau din cele percepute asupra resurselor.

Cu un volum de 2,5 mld.€ în anul 2008, veniturile din taxele de mediu ale României, ocupă în ierarhia țărilor membre ale UE locul al 25-lea, cu unul dintre cele mai reduse niveluri bugetare din această sursă.

Taxele pe energie sunt de departe cea mai semnificativă categorie a taxelor de mediu reprezentând peste trei pătrimi din volumul totalul acestora și a 20-a parte din volumul total al taxelor și contribuțiilor sociale la nivelul UE-27.

Cel mai scăzut volum al taxelor de mediu (5%) revine taxelor pentru poluare și resurse. În majoritatea țărilor UE-27, ponderea taxelor de mediu se înscrie în intervalul 2%-3% din PIB sau chiar peste.

Reducerea ponderii taxelor de mediu în România, în ultimii ani ai perioadei analizate, s-a datorat descreșterii puternice a veniturilor din taxele pe consumul de energie.

Cea mai mare pondere a taxelor pentru combustibilul consumat în transporturi (90%) se înregistrează în noile state membre ale UE.

În vechile state membre ale UE veniturile din taxe asupra consumului de combustibil variază între 90% din total taxe (Irlanda, Grecia, Portugalia și Anglia) și circa 50% în Danemarca și Suedia.

Aceste diferențe se explică prin mărimea diferenței veniturilor din taxele asupra gazelor naturale și electricitate, deosebiri care continuă să existe între țări, deși au existat încercări de micșorare a acestor diferențe prin introducerea unor rate de impozite minime asupra produselor energointensive și electricității prin amintita Energy Tax Directive (2003/95/EC).

Aceste diferențe rezultă din opțiunile pe care le fac țările membre ale UE în materie de impozite și taxe de mediu. De exemplu, în Danemarca taxa asupra consumului de electricitate, în sectoarele non-industriale, depășește rata minimă de impozitare de peste 80 de ori, iar în Suedia de circa 30 de ori. În ceea ce privește taxele pe consumul de combustibil (sectoarele transport și non-transport) diferențele între vechile și noile state membre ale UE sunt mai mici, comparativ cu taxarea energiei în ansamblu.

Ponderea ridicată a taxelor provenind din utilizarea combustibililor în transport, încălzirea clădirilor și afaceri reflectă că alegerea ratei de impozitare minimă a accizelor nu a fost influențată doar de considerente de natură ambientală. Strict din acest punct de vedere, ar fi de preferat impozitarea în mod egal a substanțelor poluante. Cu toate acestea, din motive de ordin social, pot fi practicate, de exemplu, taxe mai reduse pentru încălzirea locuințelor. Pe de altă parte, impozitarea înaltă a transporturilor pe combustibil este motivată și de generarea unor costuri marginale extinse, legate de sectorul transporturi, cum ar fi accidentele, aglomerările și zgomotul, precum și nevoia de finanțare a infrastructurii.

În concluzie, doresc să evidențiez faptul că efectele taxelor de mediu asupra eco-eficienței trebuie percepute nu doar prin prisma dimensiunii lor fiscale ca venit la buget sau proporție față de PIB, ci și ca impact favorabil economic și social mai larg generat de efectele benefice ale reducerii gradului de poluare și preservare a calității resurselor naturale și factorilor de mediu.

O abordare complexă a acestor efecte presupune studii aprofundate privind externalitățile negative și pozitive ale producției și consumului de bunuri și servicii publice și private pe întregul **ciclu de viață** al acestora începând cu faza de concepție și proiectare și terminând cu cea de consum final.

Raportul taxe pe consumul de energie/consum final de energie reprezintă o altă formulă a eco-eficienței care, de această dată în locul PIB-ului sau al producției, folosește la numărător volumul taxelor pe energie. Cu alte cuvinte, cu cât acest indicator are valori mai mari, cu atât mai mult se promovează o politică de protecție de mediului și a sănătății populației pe de o parte prin folosirea mai eficientă a resurselor energetice disponibile și, pe de alta, prin diminuarea poluării sub forme diferite, dar mai ales a GES.

Indicatorul venituri din taxe pe consumul de energie raportat la consumul final de energie în România, comparativ cu alte țări (tabelul nr.3) evidențiază următoarele aspecte mai importante:

- a) în toate țările analizate, în perioada 1995-2008 se constată **o creștere sensibilă** a indicatorului, îndeosebi în prima parte, ceea ce confirmă o multiplicare a numărului de taxe de mediu și/sau o mărire a nivelului celor existenți, o importanță deosebită având și influența creșterii prețului la energie;
- b) în întreaga perioadă, **România a înregistrat cel mai scăzut nivel** al taxelor de mediu la energie raportat la consumul final de energie, ceea ce relevă o contribuție relativ scăzută a acestor taxe la implementarea investițiilor de mediu și reconstrucție ecologică, de aici decurgând necesitatea unei mai mari capacități de absorbție a fondurilor structurale și de coeziune ale UE;

c) în țările dezvoltate membre ale UE-27, indicatorul a fost sensibil mai mare decât în noile state membre ale UE cu economie emergentă, ceea ce evidențiază decalaje importante între cele două grupe de țări atât în ceea ce privește ansamblul politicilor, instrumentelor și mecanismelor cât și posibilitățile de finanțare și eco-eficientizare în domeniul mediului;

d) în perioada 2000-2008, indicatorul analizat a înregistrat creșteri mai scăzute față de perioada 1995-2000, ceea ce constituie dovada faptului că creșterile marginale ale acesteia devin tot mai reduse, ajungându-se la așa-numita **praguri teoretice de „optimalitate”** a fiscalității sau limite „maxime” dincolo de care orice mărime de impozit nu mai produce creșteri corespunzătoare de venituri la buget, ceea ce confirmă „postulatele” curbei Laffer;

e) evoluția indicatorului în România, pe întreaga perioadă analizată a manifestat o tendință generală de creștere în condițiile în care au avut oscilații mai mari sau mai mici de la un an la altul;

f) aceeași tendință generală de creștere se înregistrează și în cazul celorlalte țări cu deosebire că nivelurile indicatorului în multe cazuri au fost de peste 2 ori mai ridicate, comparativ cu nivelul înregistrat în România.

Utilizarea indicatorului venituri din taxe pe consum de energie raportat la consumul final de energie, în esență, are o semnificație apropiată de indicatorul anterior analizat, cu deosebire că datorită numitorului cu valori mai mari ale consumului final de energie, a condus la dimensiuni mai scăzute ale raportului respectiv. În plus, la numitor s-au folosit valori deflate ale veniturilor din taxe, ceea ce implică și însemnat și reducerile de mărime ale indicatorului la numărător, ca urmare a inflației indicelui prețurilor de consum.

Calculul indicatorului de la tabelul nr.5, în condițiile aplicării deflatorului cererii finale (2000 = 100) confirmă aceleași concluzii pe care le-am prezentat la tabelul nr.4, în ceea ce privește nivelul indicatorului în România, comparativ cu celelalte țări. Spre deosebire de concluziile anterioare, calculele în prețuri comparabile evidențiază dinamici mult mai modeste ale indicatorului atât în România cât și în celelalte țări, existând perioade relativ lungi în care oscilațiile acesteia, de la un an la altul, mai degrabă nu au pus în evidență tendințele clare de scădere sau creștere, ca în cazul primului indicator.

1.3. Eficiența energetică

Calculul eficienței energetice E_{fen} a fost efectuat utilizând formula:
$$E_{fen} = \frac{PIB}{K_{gep}}$$

în care: PIB = produs intern brut în euro; K_{gep} = kilogram echivalent petrol.

După cum se poate observa, indicatorul E_{fen} are un caracter mixt, întrucât raportează un indicator în expresie valorică la unul în expresie fizică, spre deosebire de alți indicatori careau la numitor și numărător doar mărimi valorice monetare.

Datele din tabelul nr.6 evidențiază, pentru România, în anul 2008 o valoare a E_{fen} de câteva ori mai scăzută (1,62 €/K_{gep}) decât media pe UE-27 care a fost de 4,99 €/K_{gep}.

Relevanța indicatorului E_{fen} la nivel macroeconomic, dar și la nivelurile micro și mezo, vizează în primul rând performanțe economico-financiare, de mediu și sociale ale entităților analizate. Mai concret indicatorul, în **context comparativ internațional și intersectorial**, ne arată nivelul de dezvoltare economică și socială a unei țări, capacitatea acesteia de a genera valoare adăugată mai mare sau mai mică la consumul unei unități fizice de 1 kg echivalent petrol. Cei mai importanți factori care influențează mărimea E_{fen} se referă la nivelul tehnologiilor utilizate și capacitatea de upgradare a acestora, în funcție de rezultatele

de „ultimă oră” ale activității de cercetare-dezvoltare-inovare din propria țară și alte țări. Pe de altă parte, gradul de complexitate a structurii economiei naționale care se măsoară prin **ponderea** sectoarelor, ramurilor și activităților cu **cele mai mari niveluri ale valorii adăugate**, în lanțurile valorice interne și internaționale (value chains) constituie un alt factor care poate influența favorabil mărimea indicatorului care arată capacitatea de „a produce mai mult cu mai puțin”.

Cele mai mari valori ale E_{fen} s-au înregistrat în Elveția și Japonia cu o mărime de peste 10 €/Kgep, ceea ce înseamnă pentru România un decalaj de peste 5:1.

Analiza tendinței pe termen lung (1070-2008) a indicatorului E_{fen} a devenit o practică internațională tot mai uzitată în a caracteriza măsura în care economiile naționale se înscriu pe traiectoria dezvoltării durabile și a tranziției la economia cu „consum scăzut de carbon” (low carbon economy) sau economia verde (green economy). Creșterea valorilor E_{fen} pe termen lung semnifică o îmbunătățire a randamentelor energetice macroeconomice ale țărilor.

O problemă care vizează cercetările viitoare este aceea dacă creșterea eficienței energetice ca indicator cheie al eco-eficienței este, ca mărime, cea necesară și suficientă pentru menținerea și ameliorarea (mitigation) condițiilor de mediu sau a echilibrelor ecologice. O serie de cercetări în acest domeniu au ajuns la concluzia că în multe țări, mai ales în cele cu niveluri scăzute ale E_{fen} , nu se poate considera că se acționează în măsură necesară și suficientă pentru a satisface cerințele sustenabilității.

În ceea ce privește evoluția E_{fen} , pe termen lung în toate țările analizate s-a înregistrat o **tendință de creștere**, ceea ce atestă dinamica superioară a PIB-ului față de cea a consumului de energie. Aceasta, evident, nu înseamnă „doing more with less”! Oricum, această tendință se înscrie în unul din scenariile posibile de creștere a eco-eficienței, analizate anterior, fără să fie cel mai bun scenariu care presupune creșterea producției de bunuri și servicii în condițiile scăderii sau menținerii constante a consumului de energie.

Problema care se ridică, vizează însă măsura în care acest consum, în creștere și el, va fi sustenabil pe o perioadă mai îndelungată.

Poziția nefavorabilă a României în ceea ce privește indicatorul E_{fen} , evidențiază mai multe probleme cu care țara noastră se confruntă și anume:

- existența unei structuri energofage a economiei;
- productivitatea și randamentele scăzute ale tehnologiilor folosite;
- slaba utilizare a mecanismelor și instrumentelor aparținând economiei reale și celei monetare în direcția eficientizării productivității totale a factorilor;
- capacitate scăzută de adaptare la noile tendințe în ceea ce privește cele mai bune tehnologii disponibile prietenoase mediului (BAT – best available technologies).

În tabelul nr.7 s-a analizat comparativ nivelul eficienței energetice din alte țări față de cel al României considerat egal cu 1, în perioada 1995-2008, cu scopul de a vedea **dimensiunea decalajelor** ce despart România de celelalte țări, precum și **tendințele acestor decalaje**, pe termenul scurt mediu și lung.

Evoluția mărimii decalajelor E_{fen} pe care le înregistrează România față de celelalte țări membre ale UE-27 pe termen lung, din păcate, în cea mai mare parte a țărilor, dar mai ales a celor cu nivel relativ mare de dezvoltare economică a fost de creștere pe întreaga perioadă 1995-2008. Această situație nefavorabilă pentru România trebuie să dea de gândit atât celor care sunt, în palierul decizional al economiei reale, dar și celor care se ocupă de energie

din sectoarele CDI, astfel încât să se poată ajunge la soluții și mai ales decizii care să contracareze această tendință de creștere a decalajelor E_{fen} pe termen lung între România și celelalte țări. Numai pe seama unei tendințe de diminuare a decalajelor respective putem vorbi de o înscriere a economiei românești **pe traiectoria convergenței reale**. Cea mai mare dimensiune a decalajului de mărime a E_{fen} s-a înregistrat față de Germania care avea un nivel, în anul 2005, de 6 ori mai mare decât cel al României. Tendința de creștere a decalajelor României, față de țările dezvoltate în ceea ce privește E_{fen} pe termen lung a fost de creștere pe întreaga perioadă, s-a încetinit evidențiind chiar o scădere ușoară începând cu anul 2004, care totuși, este de mici proporții.

Este important de semnalat cazul câtorva țări cu economie emergentă (Slovacia, Slovenia, Cehia) care au reușit să-și diminueze într-o oarecare măsură decalajele față de țările dezvoltate, ceea ce nu se poate spune și despre România.

În concluzie la analiza E_{fen} , pe baza calculelor efectuate se poate afirma că în condițiile impactului actualei crize economice și financiare, s-au mărit decalajele de eficiență energetică dintre țările dezvoltate și cele mai puțin dezvoltate, deoarece contracția producției a fost cu mult mai mare decât în țările mai dezvoltate și capacitatea de rezistență la șocuri a puțin mai mică.

Tabelul nr.2 Veniturile din taxele de mediu în UE-27, în perioada 1995-2008, în % față de PIB

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Diferente	
															1995-2008	2000-2008
Belgia	2.2	2.5	2.5	2.4	2.5	2.3	2.3	2.2	2.3	2.4	2.3	2.2	2.1	2	-0.3	-0.3
Bulgaria	0	0	0	2	2.3	2.5	2.8	2.2	3	3.4	3.1	3.1	3.4	3.5	0	1.1
Republica Cehă	2.9	2.7	2.5	2.4	2.6	2.6	2.6	2.5	2.6	2.6	2.7	2.6	2.5	2.5	-0.5	-0.1
Danemarca	4.5	4.8	4.9	5.3	5.4	5.3	5.2	5.4	5.2	5.6	6	6.2	5.9	5.7	1.2	0.4
Germania	2.3	2.2	2.2	2.1	2.3	2.4	2.5	2.5	2.7	2.5	2.5	2.4	2.2	2.2	-0.1	-0.2
Estonia	1	1.5	1.6	1.9	1.7	1.7	2.1	2	1.9	2.1	2.3	2.2	2.3	2.4	1.4	0.7
Irlanda	3.1	3.1	3	3	3	2.9	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.4	-0.6	-0.4
Grecia	3.1	3.1	3.1	2.9	2.7	2.3	2.5	2.3	2.2	2.1	2.1	2	2	2	-1.1	-0.4
Spania	2.2	2.2	2.1	2.3	2.3	2.2	2.1	2.1	2.1	2	1.9	1.9	1.8	1.6	-0.6	-0.6
Franța	2.8	2.8	2.7	2.7	2.7	2.5	2.3	2.5	2.4	2.4	2.3	2.3	2.2	2.1	-0.7	-0.4
Italia	3.5	3.4	3.4	3.3	3.4	3.1	3	2.8	2.9	2.8	2.7	2.7	2.6	2.4	-1.1	-0.7
Cipru	2.9	2.8	2.5	2.5	2.5	2.7	3	2.9	3.7	4	3.5	3.3	3.4	3.1	0.3	0.5
Letonia	1.2	1.7	2.2	3	2.5	2.4	2.2	2.3	2.5	2.6	2.7	2.4	2.1	1.9	0.7	-0.5
Lituania	1.9	1.9	2.1	2.5	2.9	2.4	2.5	2.8	2.8	2.7	2.3	1.8	1.8	1.7	-0.2	-0.8
Luxemburg	3	2.9	3	2.9	2.8	2.8	2.8	2.8	2.8	3.1	2.9	2.6	2.5	2.5	-0.5	-0.3
Ungaria	2.9	2.8	2.8	3.3	3.3	3	2.8	2.8	2.6	2.7	2.7	2.8	2.8	2.7	-0.2	-0.3
Malta	3.2	3.1	3.5	3.9	4.1	3.7	3.7	3.4	3.4	3.1	3.3	3.4	3.8	3.5	0.3	-0.2
Olanda	3.6	3.8	3.8	3.8	3.9	3.9	3.8	3.7	3.7	3.9	3.9	4	3.8	3.9	0.2	0
Austria	2.1	2.2	2.4	2.3	2.3	2.4	2.6	2.7	2.7	2.7	2.6	2.5	2.4	2.4	0.3	0
Polonia	1.8	1.9	1.8	1.8	2.1	2.1	2.1	2.4	2.5	2.6	2.7	2.8	2.7	2.6	0.7	0.5
Portugalia	3.5	3.5	3.3	3.5	3.4	2.7	3	3.2	3.1	3.1	3.1	3	2.9	2.6	-0.9	-0.1
România	1.9	1.8	2.8	3	3.9	3.4	2.4	2.1	2.4	2.4	2	1.9	2.1	1.8	-0.1	-1.7
Slovenia	4.2	4.4	4.5	5.1	4.2	2.9	3.3	3.3	3.3	3.3	3.2	3	3	3	-1.2	0.1
Slovacia	2.3	2.1	2.1	1.9	2	2.2	2	2.2	2.4	2.5	2.4	2.3	2.1	2	-0.4	-0.2
Finlanda	2.9	3.1	3.3	3.3	3.4	3.1	3	3.1	3.2	3.2	3.1	3	2.7	2.7	-0.2	-0.4
Suedia	2.8	3.1	2.9	3	2.9	2.8	2.8	2.9	2.9	2.8	2.9	2.8	2.7	2.7	0	-0.1
Regatul Unit	2.9	2.9	2.9	3.1	3.1	3	2.8	2.7	2.7	2.6	2.5	2.4	2.5	2.4	-0.5	-0.6
Norvegia	4.4	4.5	4.3	4.1	3.9	3.4	3.4	3.4	3.3	3.3	3.1	3.1	3	2.7	-1.7	-0.8
Islanda	2.8	3	3	3.3	3.5	3.3	2.7	2.3	2.6	2.7	2.8	2.5	2.4	1.8	-1.1	-1.5
Media UE-27																
-ponderată	0	0	0	2.8	2.9	2.7	2.7	2.7	2.7	2.7	2.6	2.5	2.5	2.4	0	-0.3
-aritmetică	0	0	0	2.9	3	2.8	2.8	2.7	2.8	2.9	2.8	2.7	2.7	2.6	0	-0.2

Sursa: Commission Services, Taxation Trends in the European Union, EUROSTAT, 2010 edition.

Tabelul nr.3. Structura taxelor de mediu, în România, pe surse de proveniență și categorii, în perioada 2000-2008, în context comparativ cu UE-27
% din PIB

Categorii de taxe	2000	2001	2002	2003	Anii					2008	
					2004	2005	2006	2007	2008	Poziție in UE 27	Mld. €
Taxe de mediu	3,4	2,4	2,1	2,4	2,4	2,0	1,9	2,1	1,8	25	2,5
Total, din care:											
• Energie, din care	3,2	1,9	1,7	2,0	2,1	1,8	1,7	1,7	1,4	23	2,0
- taxe pe combustibil din transport	...	...	...	...	...	...	...	1,3	1,1	23	...
• Transport (exclusiv cel pe combustibil)	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,3	0,4	17	0,5
• Poluare/resurse	0,1	0,4	0,3	0,3	0,2	0,1	0,1	0,0	0,0	22	0,0
Taxe indirecte – total, din care:	12,2	11,3	11,6	12,3	11,7	12,9	12,8	12,6	12,0	22	16,7
• TVA	6,5	6,2	7,1	7,2	6,7	8,1	7,9	8,1	7,9	12	12,0
• Accize	3,0	2,8	2,6	3,5	3,6	3,3	3,2	3,0	2,7	17	3,8
Taxe directe –	7,0	6,4	5,8	6,0	6,4	5,3	6,0	6,7	6,7	26	9,4
Total, din care:											
• Venituri personale	3,5	3,3	2,7	2,8	2,9	2,3	2,8	3,3	3,4	25	4,7
• Venituri ale corporațiilor	3,0	2,5	2,6	2,8	3,2	2,7	2,8	3,1	3,0	15	4,2
• Contribuții sociale	11,1	10,9	10,7	9,4	9,1	9,6	9,7	9,7	9,3	19	13
- ale angajatorilor	8,1	7,1	6,5	6,2	5,9	6,4	6,3	6,2	6,0	15	8,4
- ale angajaților	5,2	5,7	5,9	4,9	4,8	4,6	5,2	5,6	5,4	24	7,6
Structura pe funcții economice											
-Consum	11,5	10,6	10,9	11,5	11,1	12,3	12,1	11,8	11,2	16	15,9
-Munca	13,2	12,8	12,3	11,1	10,7	11,0	11,5	11,8	11,5	23	16,2
• Ocupații total, din care:	13,2	12,8	12,3	11,1	10,7	11,0	11,5	11,8	11,5	23	16,1
-plătit de angajator	8,1	7,1	6,5	6,2	5,9	6,4	6,3	6,2	6,0	17	8,4
-plătit de angajat	5,2	5,7	5,9	4,9	4,8	4,6	5,2	5,6	5,4	24	7,6
-Capital	5,5	5,1	4,8	5,0	5,4	4,5	4,9	5,4	5,2	22	7,3
• Venit din capital și afaceri	4,3	3,9	3,8	4,0	4,5	3,6	3,9	4,2	4,2	22	5,9
• Venitul corporațiilor	3,0	2,7	2,6	2,8	3,2	2,7	2,8	3,1	3,0	15	4,2
• Venitul gospodăriilor	1,2	1,1	1,0	0,9	1,0	0,6	0,7	0,8	0,9	12	1,2

Sursa: Eurostat și calcule proprii

Tabelul nr..4 Veniturile din taxele pe consumul de energie raportat la consumul final de energie

Țara	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(euro/tcc)	
															Diferențe 1995-2008	2000- 2008
Belgia	91,6	90,8	90,6	91,1	92,4	92,4	92,2	97,3	97,2	109,2	116,3	115,2	128,1	115,2	23,6	22,8
Bulgaria	:	:	:	21,7	29,1	36,4	46,3	37,4	49,5	63,9	61,9	68,0	90,1	109,5	.	73,1
Rep.Cehă	38,7	41,4	42,0	46,0	51,9	55,2	65,4	74,5	72,3	81,6	96,4	103,1	114,1	132,9	94,1	77,7
Danemarca	200,5	213,1	217,7	248,7	284,1	300,8	316,1	325,6	325,5	323,8	315,6	310,8	310,1	316,7	116,2	15,9
Germania	168,3	151,9	149,6	150,3	177,5	192,7	200,4	211,6	225,0	218,7	213,8	211,0	215,8	208,1	39,8	15,4
Estonia	6,5	13,4	18,7	30,5	30,6	32,8	44,2	46,3	51,0	63,4	74,4	69,9	96,4	105,1	98,6	72,9
Irlanda	112,2	121,0	139,5	140,4	144,7	140,5	126,6	150,3	155,0	172,4	170,8	170,8	174,5	175,1	62,9	34,6
Grecia	157,7	161,3	157,0	138,6	132,2	117,3	118,0	110,8	111,1	115,4	115,7	114,6	124,7	:	-	-
Spania	128,1	134,3	128,9	138,5	144,0	137,8	136,6	141,5	141,4	141,2	140,3	146,5	148,3	148,8	20,7	11,0
Franța	169,1	167,2	169,0	170,0	176,6	173,2	162,5	178,6	172,4	177,7	175,3	180,0	180,9	:	-	-
Italia	237,9	261,6	272,1	260,9	264,5	248,7	240,4	237,5	243,6	236,1	236,4	246,0	240,2	233,2	-4,7	-15,5
Cipru	26,4	27,1	26,4	29,3	31,9	43,1	61,2	64,6	125,3	145,4	145,8	146,5	147,6	138,3	111,9	95,3
Letonia	10,1	18,1	26,7	44,7	41,6	48,3	43,2	48,2	51,7	60,8	72,7	76,1	72,9	92,0	81,8	43,7
Lituania	12,3	16,4	25,0	38,9	54,4	58,0	64,8	75,6	79,7	77,7	81,6	83,3	92,6	102,5	90,2	44,5
Luxemburg	140,9	138,6	142,7	151,2	158,8	164,3	164,3	169,7	173,8	185,7	193,7	194,6	202,7	212,8	71,9	48,5
Ungaria	58,5	58,1	62,2	77,0	79,3	79,7	82,4	92,9	96,5	96,6	100,8	103,8	118,6	121,6	63,1	42,0
Malta	52,0	60,8	72,1	126,8	139,3	142,2	176,9	157,2	120,3	121,4	134,1	153,8	228,5	:	-	-
Olanda	112,4	110,9	125,6	131,2	146,4	154,4	160,0	164,4	169,1	179,9	197,9	214,2	200,0	221,1	108,7	66,7
Austria	122,8	116,7	136,3	129,7	135,2	141,8	148,1	150,9	151,2	163,0	159,6	154,3	167,8	172,4	49,6	30,6
Polonia	20,6	26,0	27,5	37,5	47,8	58,9	66,6	77,3	72,0	75,2	95,8	101,3	120,9	131,8	111,2	72,9
Portugalia	164,6	163,5	152,5	159,4	151,4	111,8	133,4	157,7	167,7	155,3	167,5	171,7	177,0	175,0	10,4	63,3
România	15,1	13,6	25,3	36,1	56,0	58,2	37,8	36,5	43,7	51,5	59,4	62,7	67,8	79,1	64,0	20,9
Slovenia	126,0	125,8	138,5	177,3	155,0	118,3	135,9	144,6	141,4	145,7	144,9	147,4	165,7	168,8	42,8	50,6
Slovacia	29,9	29,5	32,1	32,2	33,2	42,4	37,1	44,2	59,3	70,3	77,4	83,1	95,6	107,9	78,0	65,5
Finlanda	96,7	96,2	106,6	104,5	109,8	108,7	112,7	113,7	112,4	113,3	116,0	111,6	111,4	126,5	29,7	17,8
Suedia	138,3	169,2	168,0	172,7	178,3	182,0	181,6	194,5	204,7	208,9	210,7	217,9	218,7	218,9	80,7	37,0
Anglia	142,6	18,2	185,9	211,5	225,7	249,5	238,7	247,3	227,1	238,4	234,9	240,0	253,5	219,7	77,1	-29,8
Norvegia	150,8	151,3	169,8	148,8	156,9	176,1	175,6	185,7	180,6	165,0	184,6	195,0	197,3	201,8	51,0	25,7
Islanda	42,7	44,1	46,4	45,3	46,1	49,2	39,9	38,8	38,8	43,2	60,6	69,9	:	:	-	-

Sursa: Date EUROSTAT, 2010

Tabelul nr. 5. Veniturile din taxe pe consum de energie raportate la consumul final de energie
(euro/tonă de țiței deflatat cu schimbarea procentuală cumulativă în deflatorul cererii finale, 2000=100)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Diferente	
															1995-2008	2000-2008
Belgia	97	96.2	94.8	95	95.8	92.4	90.6	95.3	94.5	103.6	106.9	103	112.3	97.1	0.1	4.7
Bulgaria	0	0	0	24.8	31.9	36.4	44.5	35.5	46.8	57.5	52.6	52.8	65.2	71.7	0	35.3
Republica Cehă	50	49.9	47.2	48.7	53.6	55.2	64.3	74.6	72.1	78.9	93.5	99.4	108.5	127.1	77.1	71.9
Danemarca	219.2	229.6	229.6	261.4	295.6	300.8	309.3	315.9	313.9	306.6	290.3	279.8	272.6	267.8	48.6	-33.1
Germania	172.4	154.9	151.3	152.1	179.7	192.7	198.3	208.3	221	213.3	206.6	202	203.5	193.8	21.5	1.1
Estonia	10	17.1	21.4	33.4	32.4	32.2	42	42.9	46.3	56	65.4	68.8	70.5	71.5	61.5	39.3
Irlanda	133	141.7	159	154	153.8	140.5	120.5	139.9	144.7	158.8	154.7	150.7	153.2	153.1	20.1	12.5
Grecia	206.1	197.1	181.2	152.5	141.6	117.3	114.5	104.7	102	103.2	100.3	96.3	102	0	0	0
Spania	147.5	150.3	140.5	148.7	151.3	137.8	130.6	133.5	129.8	125	119.3	119.8	117.7	114.6	-32.8	-23.2
Franța	177	172.6	172.6	173.3	180.6	173.2	160.3	174.5	166.7	168.9	163	163.3	160.7	0	0	0
Italia	270.5	287.4	291.9	274.8	274.2	248.7	234.2	225.6	226.4	213.8	208	210.1	200.2	187.4	-83.1	-61.3
Cipru	30.4	30.4	28.8	31.3	33.2	43.1	59.6	62.2	116.8	131.9	128.2	125.5	122.6	110	79.6	66.9
Letonia	13.7	21.3	29.1	47.3	43.6	48.3	42.6	45.8	47	51.3	55.1	52.9	49.8	48.4	34.7	0.1
Lituania	14.9	17.6	25.1	38.8	55.5	58	65.4	77.4	83	79.8	78.3	74.5	77.4	78.5	63.7	20.5
Luxemburg	167.8	158.1	160.4	169	170.6	164.3	167.3	172.2	177.6	181.2	177.7	168.5	167.6	173.3	5.5	9
Ungaria	110.8	83	83.2	91.5	88	79.7	77.2	85.2	85.9	84.1	86.8	85.6	97.8	98	-12.8	18.3
Malta	60.7	69.5	81.7	140.6	152.6	142.2	179.8	156.4	119.3	118.2	127.1	138.3	197	0	0	0
Olanda	123.1	120.1	133	138.5	153.3	154.4	155.4	157.6	160.6	169.5	182.2	193.1	177.5	189.8	66.6	35.3
Austria	128.5	120.5	140.6	133.1	137.7	141.8	146.2	148.1	147	156.1	149.5	141.3	150.2	150.2	21.7	8.4
Polonia	34.7	37.6	34.9	42.8	51.4	58.9	64.7	72.9	66.6	66.7	84.2	87.6	101.3	108	73.2	49
Portugalia	190.6	184.9	166.6	170.2	158.3	111.8	129.9	150	156.7	141.7	148.8	148.1	149.1	143.4	-47.2	31.6
România	160.2	98.4	77.1	77.2	79	58.2	27.9	22.3	22.1	23	24.7	26.2	32.2	26.2	-134	-32
Slovenia	180.3	161.6	165.6	201.4	167.8	118.3	126.1	126.7	118.9	118.4	114.5	113.7	123.9	121.7	-58.5	3.4
Slovacia	40.1	37.2	38.1	37.3	36.9	42.4	35.2	40.8	52.9	60.2	65	67.8	77.3	84.6	44.5	42.2
Finlanda	103.4	101.9	111.7	108.2	113.8	108.7	111	111.8	110.8	110.7	111.7	105.1	102.7	114.5	11.1	5.8
Suedia	144.7	177.4	173.8	178.3	182.3	182	176.7	187.1	195.2	198.8	196.9	199.6	196.6	190.1	45.4	8.1
Regatul Unit	152.3	154	192.3	217.8	229.4	249.5	235	239	214.1	220.8	212.5	210.9	218	180.2	27.9	-69.3
Norvegia	188.9	183.4	201.4	177	178.4	176.1	172.8	187.7	178	155	162.4	160.7	159.1	150.7	-38.1	-25.4
Islanda	49.6	49.8	51.4	48.5	48.1	49.2	35.6	33.5	33.7	36.5	51.2	52.9	0	0	0	0
Media UE-27																
-ponderată	0	0	0	177.7	189	188.8	182.5	187.7	184.5	182.8	177.4	175.8	174.9	166.4	0	-22.5
-aritmetică	0	0	0	123.8	127.6	121.8	122.6	126.2	127.4	129.6	129.8	129.1	133.6	129.2	0	7.4

Sursa:

Commission

services,

EUROSTAT,

2010.

Tabelul nr. 6. Mărimea indicatorului E_{fen} (eficiență energetică), la nivel macroeconomic în România comparativ cu alte țări, în perioada 1990-2008

(€/Kgep)

geo\time	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
UE-27	:	:	:	:	:	4.79	4.71	4.89	4.99	5.17	5.33	5.32	5.40	5.34	5.41	5.51	5.69	5.91	5.98
UE-15	:	4.63	4.73	4.72	4.83	5.51	5.40	5.58	5.63	5.80	5.96	5.94	6.03	5.97	6.03	6.14	6.35	6.59	6.66
AUSTRIA	6.40	6.20	6.58	6.56	6.72	6.61	6.35	6.49	6.64	6.83	7.12	6.77	6.81	6.53	6.59	6.49	6.77	7.10	7.24
BELGIA	4.05	3.94	3.93	3.98	3.82	3.98	3.84	3.90	3.90	3.98	4.10	4.21	4.40	4.21	4.36	4.46	4.64	5.03	5.00
BULGARIA	-	0.46	0.46	0.43	0.45	0.61	0.55	0.60	0.63	0.71	0.73	0.73	0.78	0.79	0.87	0.88	0.91	0.98	1.05
CEHIA	0.85	0.82	0.82	0.86	0.92	1.37	1.38	1.37	1.42	1.54	1.51	1.51	1.52	1.45	1.51	1.66	1.70	1.81	1.90
DANEMARCA	7.50	6.86	7.31	7.07	7.20	7.43	6.81	7.52	7.87	8.34	8.89	8.66	8.87	8.48	8.93	9.39	9.08	9.46	9.69
ELVEȚIA	9.86	9.69	9.59	9.78	9.76	9.91	9.78	9.76	9.88	10.02	10.47	10.01	10.39	10.33	10.48	10.74	10.66	11.53	11.29
FINLANDA	3.71	3.46	3.47	3.33	3.25	3.59	3.48	3.49	3.61	3.81	4.05	4.06	3.89	3.75	3.88	4.32	4.14	4.38	4.59
FRANȚA	5.22	5.00	5.09	5.00	5.31	5.22	4.98	5.24	5.26	5.44	5.58	5.51	5.56	5.53	5.57	5.66	5.85	6.05	5.99
GERMANIA	-	5.03	5.23	5.23	5.42	5.48	5.36	5.52	5.64	5.86	6.02	5.91	6.04	5.98	6.01	6.12	6.21	6.58	6.61
GRECIA	3.78	3.86	3.78	3.79	3.71	4.80	4.67	4.80	4.73	4.91	4.88	4.94	4.97	5.19	5.35	5.37	5.58	5.83	5.88
ITALIA	6.63	6.57	6.64	6.62	6.82	6.66	6.73	6.76	6.66	6.65	6.82	6.91	6.92	6.61	6.64	6.60	6.78	6.95	7.01
NORVEGIA	5.87	5.94	6.03	5.84	6.23	6.41	6.89	6.90	6.78	6.60	6.98	7.03	7.82	6.99	7.02	7.63	7.67	7.85	7.30
OLANDA	4.50	4.40	4.48	4.49	4.62	4.58	4.58	4.83	5.01	5.30	5.41	5.35	5.35	5.22	5.22	5.41	5.72	5.58	5.82
POLONIA	-	0.93	0.61	0.61	0.93	1.42	1.46	1.58	1.77	1.89	2.04	2.06	2.13	2.15	2.26	2.31	2.34	2.50	2.60
PORTUGALIA	4.33	4.43	4.20	4.18	4.08	5.04	5.24	5.15	5.06	4.91	5.06	5.13	4.96	5.03	4.96	4.89	5.29	5.28	5.50
REGATUL UNIT	5.90	5.70	5.70	5.77	5.98	6.19	6.02	6.38	6.46	6.72	6.91	7.05	7.38	7.45	7.63	7.78	8.13	8.68	8.79
ROMÂNIA	-	0.78	0.81	0.83	0.91	0.91	0.92	0.92	0.96	1.07	1.09	1.16	1.17	1.18	1.30	1.36	1.42	1.52	1.62
SLOVACIA	-	:	0.86	0.93	1.00	1.05	1.11	1.17	1.24	1.24	1.25	1.18	1.23	1.29	1.37	1.46	1.61	1.85	1.92
SPANIA	5.21	5.07	5.07	5.21	5.02	5.00	5.20	5.14	5.08	5.06	5.09	5.16	5.12	5.11	5.04	5.11	5.34	5.43	5.66
SUEDIA	4.62	4.42	4.61	4.48	4.37	4.48	4.45	4.69	4.84	5.11	5.63	5.36	5.38	5.62	5.63	5.92	6.34	6.57	6.57
UNGARIA	-	1.21	1.30	1.28	1.34	1.63	1.62	1.73	1.83	1.91	2.05	2.09	2.15	2.15	2.29	2.25	2.35	2.45	2.49
TURCIA	3.86	3.83	3.95	4.03	3.88	3.81	3.75	3.82	3.87	3.81	3.73	3.81	3.84	3.84	4.07	4.24	4.09	3.99	4.07
SUA	3.99	3.95	4.01	4.05	4.14	4.19	4.25	4.39	4.54	4.63	4.69	4.84	4.88	4.98	5.03	5.17	5.36	5.38	5.53
JAPONIA	10.13	10.35	10.20	10.15	9.68	9.60	9.64	9.68	9.65	9.47	9.62	9.80	9.81	10.04	9.99	10.22	10.54	10.87	11.09

Sursa: Calcule proprii pe baza datelor primare Eurostat.

Tabelul nr.7 Raportul comparativ dintre eficiența energetică a altor țări față de eficiența energetică a României (=1,00) în perioada 1995-2008

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
România	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Belgia	0.52	0.70	1.38	1.54	1.89	2.35	3.40	4.08	4.47	4.50	3.75	3.39	3.50	3.33
Bulgaria	0.00	0.00	0.00	0.48	0.68	0.85	1.37	1.52	1.70	1.76	1.37	1.23	1.25	1.40
Rep. Cehă	0.20	0.34	0.69	0.79	1.01	1.24	2.13	2.81	3.01	3.16	2.79	2.77	2.84	3.48
Danemarca	0.58	0.87	1.71	1.92	2.69	3.32	5.13	5.52	6.57	5.71	3.90	3.27	3.02	3.22
Germania	0.89	1.29	2.50	2.82	3.85	4.70	6.84	7.86	8.90	8.89	6.66	6.10	6.05	6.03
Estonia	0.12	0.21	0.49	0.68	0.94	1.11	1.72	2.03	2.65	2.78	2.29	2.27	2.01	2.04
Irlanda	0.51	0.84	1.93	2.00	2.53	2.83	4.33	5.50	6.55	6.61	4.99	4.37	4.01	4.37
Grecia	0.79	1.16	2.13	2.05	2.58	2.98	3.95	4.29	5.04	5.11	3.85	3.49	3.33	-
Spania	0.79	1.25	2.43	2.52	3.24	3.66	5.36	6.00	6.72	6.51	5.06	4.57	4.27	4.90
Franța	0.75	1.13	2.32	2.50	3.30	4.05	6.01	6.58	7.55	7.33	5.72	5.14	4.77	-
Italia	0.92	1.54	3.12	3.24	3.97	4.69	6.73	7.60	8.49	7.96	6.21	5.64	5.03	5.35
Cipru	0.12	0.20	0.42	0.49	0.66	0.94	1.72	2.02	3.43	3.44	2.95	2.75	2.36	2.43
Letonia	0.14	0.23	0.48	0.61	0.86	1.18	1.67	1.88	2.04	2.05	1.65	1.59	1.55	1.75
Lituania	0.09	0.17	0.44	0.60	0.94	1.42	2.26	2.60	3.22	3.08	2.74	3.00	2.81	3.16
Luxemburg	0.66	1.00	1.95	2.27	3.00	3.43	5.16	5.80	6.89	6.09	4.94	4.70	4.38	4.75
Ungaria	0.45	0.54	1.08	1.08	1.32	1.56	2.38	2.87	3.59	3.24	2.59	2.22	2.28	2.49
Malta	0.23	0.41	0.85	1.40	1.83	2.25	4.19	4.34	3.82	3.97	3.10	2.95	3.39	0.00
Olanda	0.41	0.58	1.27	1.42	1.94	2.32	3.53	4.02	4.72	4.53	3.77	3.50	3.05	3.34
Austria	0.73	1.00	2.13	2.25	2.95	3.46	4.84	5.18	5.91	6.02	4.64	4.09	4.09	4.29
Polonia	0.23	0.36	0.71	0.93	1.21	1.64	2.66	2.87	2.89	2.68	2.52	2.27	2.45	2.84
Portugalia	0.65	0.97	1.84	1.89	2.30	2.42	3.73	4.42	5.49	4.76	3.87	3.58	3.36	3.78
Slovenia	0.51	0.67	1.34	1.54	1.97	2.39	3.29	3.62	3.91	3.74	2.89	2.75	2.70	2.78
Slovacia	0.21	0.32	0.66	0.76	0.91	1.13	1.52	1.75	2.39	2.51	2.19	2.14	2.41	2.90
Finlanda	0.42	0.60	1.23	1.28	1.65	2.05	3.19	3.41	3.76	3.60	2.90	2.54	2.48	2.90
Suedia	0.61	1.05	2.18	2.31	3.10	3.80	5.44	6.08	7.32	7.40	5.48	5.17	4.76	4.82
Regatul Unit	0.62	0.97	2.41	2.74	3.65	4.87	7.23	8.35	8.62	8.84	6.85	6.37	5.70	5.14
Norvegia	0.51	0.75	1.70	1.68	2.25	3.03	4.38	5.21	5.86	4.90	4.23	3.75	3.46	3.82
Islanda	0.21	0.30	0.62	0.57	0.67	2.35	1.14	1.38	1.41	1.41	1.48	1.54	-	-

Sursa: Calcule proprii pe baza datelor primare Eurostat.

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EXPERIENCES AND TENDENCIES OF DECENTRALIZATION AT REGIONAL LEVEL IN THE EUROPEAN UNION

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Romania's integration into the European Union requires, in addition to the complex process of policy transfer, learning new ways to make policies characteristic to a culture of a multi-level governance and of partnerships. From the different levels of governance of the European model, the regional level ("regional governance") reflects most accurately, in our opinion, the complexity of reconfiguring the state's role in economy, at the beginning of this new millennium, in the European Union, and presents the greatest practical importance for Romania, as a new Member State in the European Union, as at the regional level structures are more flexible, and best practices more quickly assimilated. The selection of the best economic policies of regional growth and development, the choice of objectives from a number of competing options, the calibration of powers, roles, competences and responsibilities, in time and space, and the promotion of solutions of the win-win type require resorting to and combination of appropriate and effective tools. Illustrative of the new context, the policy of regional growth and development must incorporate, in Romania as well, more knowledge, more creativity, new combinations of skills and new areas of expertise. This paper presents the preliminary results of the research related to a post-doctoral research project: "Economic policies for regional growth and development. Challenges for Romania in the context of economic-financial crisis and integration into the European model", developed within the project "Economic scientific research, support of the welfare and human development in the European context", financed during 2010-2013 from the European Social Fund (ESF) and implemented by the National Institute of Economic Research "Costin C. Kirițescu" of the Romanian Academy, from December 1, 2010, to November 30, 2012, coordinator: prof. Valeriu Ioan Franc, PhD. The question we intend to answer in the present stage of our research, based on the comparative analysis of the decentralization systems of several Member States of the European Union, as well as on the analysis of regional disparities existing at the European Union level and of the effects of economic integration, is - to what extent should the competences of the regional policy be concentrated in the hands of the regional authorities or of the European Union rather than to be left individually to the Member States so as they may develop their own regional policy? What we pursue in this paper, based on the analysis of experiences of decentralization of economic policy competences at the level of the European Union, is the identification of the regional implications of intermingling tendencies of decentralization, centralization, respectively supranationalization and, implicitly, the analysis of the manner of reconfiguration of the state's role in economy at the regional level, in the context of integration into the European model. The research into the manner of reconfiguration of the state's role in economy at a regional level requires a review of the allocative, distributive and regulatory role of the state, from a the regional perspective, the analysis on the one hand, of the decentralization of economic policy competences from the national to the regional level (e.g. national level: provision of pure public goods, such as national defence and centralization of fiscal policy competences in order to achieve macroeconomic stability and income redistribution; regional level: provision of mixed public goods, such as waste collection and community police), on the other hand, centralization / supranationalization of regional competences at the level of the European Union.

Keywords: *the role of the state in economy, decentralization, European governance, regionalization, regional governance.*

JEL Classification: *F15, H4, H5, H7, R5*

The concept of decentralization

In the broad sense of the term, *decentralization* means the transfer of authority or responsibility, duties or competences from the level of central public administration or central government to a lower level or from the public sector to the private sector or to non-governmental organizations.

As defined by the World Bank, decentralization means “the transfer of authority and responsibility for public functions from the central government to intermediate and local governments or quasi-independent government organizations and/or the private sector” (The World Bank Group, 2011). As the transfer of competences always involves the transfer of financial and human resources as well, decentralization raises not only problems of a political, administrative nature but also of economic, fiscal etc. Depending on the predominance of one or other of these aspects, the literature marks the following forms of decentralization: *administrative* (whose sub-forms in ascending order of the degree of decentralization are: *deconcentration, delegation, devolution*), *economic, fiscal and political*, noting that these forms are obviously interrelated. If the transfer of competences does not exceed the public sector, according to the lower level to which the duties or powers are transferred, one can speak of different levels of decentralization - *territorial, regional, local* level etc. If the transfer of powers is from public to private sector or to NGOs, we talk about *privatization* and *denationalization*.

The reasons why decentralization is brought into public debate and implemented are various. Widely debated in the literature, the reasons for decentralization can be classified, in our opinion, in three categories. The first category is related to *malfunctions* of the public administration or of the central government which leads to lack of response or low sensitivity to local needs: poor allocation of resources, public services absent or defective at a local level, inequities of redistribution at the territorial level, blockages in the central decision making; poor planning and control of the economic and social activities, excessive bureaucracy, low efficiency, flexibility and innovativeness of public policies; low quality of public services etc. Another category of reasons for decentralization are *crises*: political crises (ethnic or religious conflicts, difficult post-conflict situations, states of war etc.), or economic crises, implicitly fiscal, budgetary crises etc. Finally, reasons for decentralization are also represented by *transitions* from authoritarian political systems to democratic systems, from the system of commanded economy to the market economy etc., even the process of a state’s integration into the European Union (EU) is a form of transition.

Whatever, though, the reasons of decentralization, it is widely admitted that politics is the driving force behind it (Eaton et al., 2010). The typical political *objectives* pursued in the process of decentralization are to increase the capacity of political response and to broaden participation in political, economic and social activities at the territorial, regional or local level. Whatever their form, size etc., decentralization requires a change in the institutional rules of distribution of resources and responsibilities between different levels of government, implicitly changes in power and authority and, as highlighted by Kent Eaton, Kai Kaiser and Paul Smoke – as always when power and authority are at stake – decentralization creates controversy and heated debate, regarding the justification of the need of a decentralization process, the objectives pursued, the reform involved, the possible disadvantages etc. (Eaton et al., 2010).

The debate about decentralization is not new. In the EU, subject to our analysis, in the last two decades of the last century, decentralization was often put forward, on the one hand, as a result of the crisis of *the Welfare State*, leading to various experiences of reform through decentralization, the transfer of competences involved being, in this case, of the type *central-local* or *nationalization-privatization*, on the other hand, as a consequence of the *fragmentation of the power of the nation-state* and reconfiguration on various levels of the state’s role in the economy in the context of *the process of integration into EU* (Dodescu, 2011), further implying a transfer of powers of the *central-regional* and *central-supranational* type.

At present, under the economic-financial crisis, the reverse phenomenon of *centralization* gains ground, confirming the validity, on a long term, of the theories on the *cyclicity of the degree of the state's involvement in the economy* (Dobrescu, 1992), on the “*pendular movement*” State-Market or nationalization-denationalization (Dogan and Pelasy, 1992) or on the “*political pendulum*” that moves between the *national-transnational-global-European* arenas, depending on the relative attraction force of these magnetic fields (Wallace and Wallace, 2000).

In our opinion, as the days of the controversy *State versus Market*, in the sense of the “*mirror approach*”, have passed, so has the time of the polemic *Centralization versus Decentralization*. Located in the context of globalization and instability, the debate on decentralization should take into consideration the change of governance levels and “locations” (Wallace and Wallace, 2000), the increase of the role of the sub-national actors (Sharma, 2008, 2011). It is more likely the “time” of networks, partnerships, multitude of actors and interests. This trend is present both globally and at the EU level. As the World Bank showed in its reports, an *appropriate balance of centralization and decentralization* is essential for effective and efficient functioning of government. This translates into balance in decentralization of functions and responsibilities, on the one hand, and centralization of the roles of coordination and supervision, on the other. The combination of functions resulting – decentralized responsibilities with centralized roles of coordination and monitoring – should allow strengthening of the institutional capacity at a local level and effective management of decentralized functions in partnership between local actors - local governments, local private enterprises, local NGOs etc. and central actors involved in planning, coordination etc. (The World Bank Group, 2011). Moreover, in the EU context – of an emphasis on the role of networks in developing and implementing policies, of an assertion of the “*multi-level policy networks*” (Börzel, 1997), unlike the traditional analysis of decentralization, focusing in particular on the political, administrative and fiscal dimensions, or on the provision of services, emphasis is on the *interdependences* between the levels concerned with decentralization, in particular, respectively on the *interdependences* between actors (partners, the parties interested and the multipliers) involved (European Commission, 2007).

We next undertake is to analyse the reconfiguration of state's role in economy *at a regional level*, in the economic literature devoted to decentralization and in the context of the European model, in order to identify the regional implications of the interpenetration of the tendencies of *decentralization, centralization, respectively supranationalization*. Consideration on how to reconfigure the state's role in economy at a regional level requires review of the *state's allocative, distributive and regulatory roles* (Dobrescu, 2000) *from the regional perspective*, the analysis, on the one hand, of the decentralization from the national to the regional level (e.g. national level: provision of pure public goods, such as national defence and fiscal policy and centralization of fiscal policy competences in order to achieve macroeconomic stability and income redistribution; regional level: the provision of mixed public goods as for example, sewage collection and community police), on the other hand, centralization in the sense of supranationalization, regional competences at the EU level.

The economic approach of decentralization. Examination of the way of reconfiguring the state's allocative, distributive and the regulatory role in economy at regional level

The economic literature dedicated to decentralization studies the impact of different types of decentralization on *efficiency, equity* and/or *economic equilibrium* in order to define the optimal level of government decentralization based on comparing the advantages and disadvantages of different solutions for decentralization. The economic objectives pursued in the process of decentralization of production, distribution, financing etc. of goods or services at regional or local

level can coincide with political objectives typical for decentralization: increased political responsiveness and participation at the territorial, regional or local level. As remarked by Kent Eaton, Kai Kaiser and Paul Smoke –“fortunately, the decentralization may be one of those situations when politics and economy can serve the same purpose” (Eaton et al., 2010). This statement should not, however, lead to too high a dose of optimism.

In terms of classical economic theory, the market is the ultimate form of decentralization. At the other extreme, one might consider that the state is automatically responsible for producing and distributing public goods or services. In practice, however, the market can offer often more efficient solutions than the state in the production or distribution of public goods. Also, local or regional solutions may be more effective than the central ones. On the other hand, still in practice, if not well chosen, local solutions can cause loss of economies of scale for public services, failure in the production, provision of public services due to low administrative or technical capacity at local level. Clearly, we are talking here of *the state's allocative role* and of *the objective of efficient resources allocation*. At the same time, by decentralization the equitable distribution may be affected by providing social services that prove inadequate or do not reach all those “in need”. The cause may be the transfer of responsibilities without adequate financial resources. In this case, we talk about *the state's distributive role* and about *the objective of social equity*. Finally, the *state's regulatory role* subordinated to the *objective of economic equilibrium* can be affected when, for example, the coordination of economic policies moves from the hands of central government to the hands of regional government and this fact deteriorates the credit conditions and the possibilities to cover budget deficits at regional level or to the hands of local government and this transfer gives way to corruption at local level.

In terms of theory, there are some established *principles* underlying decentralization, a fugitive foray into their world being based on *Stigler's principles* (1957) that the decision-making should be placed at the lowest level of government in accordance with the objective of the efficient allocation of resources, the degree of decentralization being determined by the extent of the economies of scale and the effects of the type “*spill-over*” (benefits-costs); on *Olson's principle*, characteristic to the Public Choice School, whereby small groups of powerful interests are more efficient in absorbing public funds (Olson, 1969), on Oates's *theorem of decentralization* according to which every public service should be provided at that level of government that has control over the minimum geographic area able to internalize the corresponding costs and benefits (Oates, 1972), on the *principle of subsidiarity* as set by the Maastricht Treaty (1992), whose purpose is to ensure that decisions in the EU are taken at a level as close to the citizens as possible. The theoretical perspectives according to which the decentralization issue is addressed are: *the traditional fiscal federalism* and *The New Public Management* - which focus their attention on the so-called “market failures” and on the ability to deliver public goods efficiently and equitably, the *Public Choice School* and the *Economic Institutionalism* - which focus on “government failures”, respectively the approach of the “*network governance*” type (Shah, 2006).

Defining *government decentralization*, considered economically, as a process of transfer and distribution of state duties in the field of public expenditure and revenue, from national to local or regional level, we try to point out the specific aspects of decentralization, at a regional level, in terms of the three *roles of the State: allocative, distributive and regulatory*.

a). *Regional decentralization and optimal allocation of resources*

In what the *the state's allocative role* is concerned, the analysis of the regional decentralization focuses mainly on *collective goods (public) goods*. According to the current acceptance regarding a democratic state, the number of collective goods produced centrally needs to decrease

and to be restricted mainly to pure collective goods: army, security, foreign policy, justice etc. Not all *collective goods*, however, must be decentralized in the same way or at the same level. The state's role (of the central government) and the limits of decentralization in ensuring the provision of collective goods depend, first, on the nature of these goods and services, on the economies of scale affecting the technical efficiency and on the extent of the spillover effects, beyond jurisdictional boundaries, and on the structure of competition in producing or delivering a particular public good or service. Therefore, choosing a solution of decentralization or a combination of solutions such as decentralized - managed competition - privatization etc. starts from the assessment of the lowest level of governmental organization, at which the public good or service can be produced and delivered effectively, or of the most appropriate forms of privatization (The World Bank Group, 2011).

The possibilities of decentralization of collective goods supply depends primarily on *their effect of overflow* (spatial opening of their externalities), respectively on the *non-rivalry* of their consumption (the possibility of their being used by a large number of people without an additional production cost; a person's consumption doesn't reduce by anything the amount available for all others, and is therefore non-rival to the consumption of others), respectively *non-exclusion* of their consumption (implies that the supplier of the collective good is unable to exclude someone from the consumption of these goods reserving that right to those who will pay a price, so, once produced, the collective good is available to all, free of charge). While some collective goods are only beneficial in the vicinity of the geographical area of their place of production (local police, street lighting, coastal lighthouse for navigation, traffic lights etc.), others have a wider spatial opening of their externalities - regional (road or rail transport, postal service, telecommunications, higher education etc.) or national (national defence, justice etc.). The first category - *local collective goods* - is consumed exclusively at the level of a local community. The indivisible nature of these goods and their optional use create redistributive externalities (for example, those who never go out at night bear the cost of lighting public without having a benefit in exchange), but these do not go beyond local boundaries, existing the possibility to "internalize" them at a local level, the production in an optimal quantity at the local community level being possible without the externalities affecting neighbouring communities. In contrast, there are *national collective goods*, whose benefits are shared equally among all inhabitants of a country. The most illustrative example is the national defence, for which the risks and externalities of a possible decentralization are obvious for communities not large enough to internalize externalities. Between the two extremes we can fit the *regional collective goods* whose externalities extend beyond local boundaries, but which are consumed unevenly. Decentralization of their offer is only possible if the region is large enough to internalize the effects of an overflow, with the risk of insufficient supply, while centralization of their offer involves a uniformity that neglects the regional differences between the tastes and needs of the population, causing allocational and redistributive externalities. (Atkinson and Stiglitz, 1980; Brown and Jackson, 1990; Weber, 1991; Black et al., 2009).

b). Regional decentralization and equitable distribution

From the perspective of the *state's distributive role*, regional decentralization should be analyzed according to its potential impact on the *choice of domicile (emigration / immigration)* and on the *firms' location*. If, for example, a regional government decides to operate a redistribution effort much higher than that of the neighbouring community, applying a very progressive taxation, the community at stake will face a phenomenon of emigration of people receiving an income higher than average to communities with lighter taxation coupled with an opposite phenomenon, the immigration of the poor. Similarly, there may be a phenomenon of delocalisation of firms. For the community concerned this policy will therefore have a *boomerang effect*, because it will

increase its costs and diminish its revenue at the same time. Consequently, the national competence on the redistribution plan depends on the level of the following parameters: the amplitude of the redistributive correction; the disparity of the redistribution efforts undertaken by neighbouring communities, the spatial mobility of economic agents. The reduced mobility of economic agents or the strong attachment of individuals or firms to a region can counterbalance this boomerang effect. Therefore, decentralization of redistributive policy determines, with the price of a greater vertical equity, a horizontal inequity, the decentralization chances being small and dependent on the spatial mobility of the economic agents, on the size and homogeneity of the regional community, in order to practice, within certain limits, an active policy of redistribution (Atkinson and Stiglitz, 1980; Brown and Jackson, 1990; Weber, 1991; Black et al., 2009).

c). Regional decentralization and economic equilibrium

From the perspective of *the state's regulatory role*, the regional decentralization analysis must start from the indisputable fact that *the economic equilibrium* shows the characteristics of a *national collective good*, due to the spatial openness of its externalities. Even though their intensity varies from one region to another, the fluctuations in economic activity and the economic imbalances concern the national economy as a whole, therefore, the decentralization of the stabilization policy increases the risk that a region shall benefit from the stabilization effort of others without doing anything in exchange. On the other hand, the impact of regional stabilization policy is the weaker for the region concerned, the more open it is, the multiplier effect being only partial, because a part of the induced demand addresses a production made outside the region, respectively, the higher national capital mobility is, which deteriorates the conditions of loan at a regional level and the possibilities to cover budget deficits (Atkinson and Stiglitz, 1980; Brown and Jackson, 1990; Weber, 1991; Black et al., 2009).

In conclusion, the analysis of decentralization at a regional level in terms of the three roles of the state, according to the theory of fiscal federalism, leads to a rather simple allocation scheme - the distributive and regulatory role are preferable at a central level, the allocative role being shareable or possible to decentralize in accordance with the *spatial openness of the externalities of collective goods*, respectively with the characteristics of *non-rivalry* and *non-exclusion* of their consumption.

Decentralization at the regional level in the EU. Trends

The decentralization of the responsibilities of governments in the EU must be considered in the context of the *fiscal federalism* and of the *subsidiarity principle*, according to the provision of the Maastricht Treaty. The theory of traditional fiscal federalism involves an administrative organization structured on three levels: *federal, state, local* and, implicitly, a division of fiscal responsibilities between the three levels. The specificity of the EU - as an entity that tends to become a federal state is linked to adding *the regional level* to the three levels of the theory of traditional fiscal federalism. Thus, at present, in the EU there are the following levels of government: *union, national states, regions, local authorities* (usually *counties* and *municipalities*). The allocation of powers at the appropriate level in accordance with the principle of subsidiarity stipulated by the Treaty of Maastricht answers to criticisms about the many overlaps between the upper and lower levels and to the heterogeneity of the administrative arrangements from a Member State to another, hence a tendency of *supranationalization* of competences of the national states (governments) manifesting simultaneously at the EU level, along with the *decentralization* of some of their other competences to lower levels (regional and local). The principle of subsidiarity is intended to ensure that decision-making in the European Union is as closer to the citizen as possible and to validate the need for action at community level considering the possibilities existing at national, regional or local level. According to The Treaty

of Maastricht (Article 3b) “The Community shall act within the powers conferred and objectives assigned to it by this Treaty. In areas not within its exclusive competence, the Community shall take no action, in accordance with the principle of subsidiarity only if and insofar as the objectives of the proposed action cannot be achieved satisfactorily by the Member States, but can be better achieved at community level due to the extent or the effects of the proposed action.” Relative to the state’s roles in the context of *fiscal federalism* and *subsidiarity principle*, according to the provision of the Maastricht Treaty, the *supranational (European)* level is in charge with coordinating the stabilization policy, its management being a competence of the Member States, and with coordinating the territorial redistribution so as to ensure that all regions of the EU offer equal opportunities and uniform provisions of certain basic services, the Member States and the local communities maintaining their responsibilities for managing social policy and income redistribution to suit the preferences of each community (Oates, 2001; Majocchi, 2008). Therefore, the *regulatory role* is centralized and shared between the national level (management) and supranational (coordination), the *distributive role* is mostly centralized and shared between the national level (management) and supranational (coordination) and decentralized at a regional and local level, depending on the possibilities to meet local community preferences. Regarding *the allocative role*, as already noted, this is the one that best meets the requirements of decentralization, depending on the characteristics of the *collective goods*, at a supranational level, here concentrating all efforts to strengthen the internal, single market.

Practically, the European Union’s vision on the policy implementation is a *decentralized one, of the “network” type, of a non-hierarchical nature, and involving sub-national, national and supranational actors*. Following the debates within the European Union, on “*European governance*”, starting from the *White Paper on European Governance*, adopted in July 2001, which defines clearly the five levels of governance: *global, European, national, regional and local* (European Commission, 2001) and describes the geographical decentralization of the EU policy and the sharing of powers and responsibilities of the type EU - member states - regions (European Commission, 2002), continuing with the debate on the *Future of Europe, the European Constitution and the Lisbon Treaty* and, more recently, *the 2020 Strategy*, one can clearly notice the *increase* in the capacity of supranational regulation along with *the decentralization of powers of economic policy at a regional level, the implementation of the principle of subsidiarity and the emphasis of the role of networks in developing and implementing European policies* (European Commission, 2001, 2003a, 2005, 2007, 2010).

However, beyond the complexity of the process of transformation of the “*European governance*” into a “*network type governance*” (Dodescu, 2011), *in terms of a future federal state*, the tendency of *supranationalization* merely means an increase in the EU powers, it being added with further performance of the three roles of the national state described by the public economy: *allocative role* (currently seen in terms of strengthening the internal market and in view of the federal state, including defence, research and development and European transport network etc.), *distributive role* (social protection and struggle against poverty), the *regulatory role* (the coordination of macroeconomic policy aiming at stability at the Union level). With a view to the European federal state, the roles of national governments are simplified, comprising the legal framework, ensuring public order, national infrastructure, public administration, regional distribution, public loans etc., while education, health, local transportation and other services of local interest will be responsibilities of local governments.

Decentralization at a regional level in the EU. Experiences

In the EU states, *the regional level* covers different political and administrative realities, being the result of a process of *decentralization* that combines the specificity of organization of state power in relation to the territory and the historical evolution of that state, to the requirement imposed by the EU of the existence of a sub-national administrative level but higher than the local one. For the EU, the need of a regional level is linked, primarily, to the implementation of financial assistance given by the regional policy, secondly, to the prospect transformation of the EU into a federal state and the high degree of autonomy granted to this level within federalism.

From the perspective of historical developments of the European states, of how nation-states were formed, federalism, however, is rather an exception than a rule, Switzerland, Germany (established in the 19th century), Austria and Belgium (established in the 20th century, in 1920, respectively in 1993) being the only *federal states* in Europe. Most European countries were founded as and are up to now *unitary states*. Obviously, in the EU, the regional level enjoys the greatest autonomy and knows the fastest growth within the *federal states* (Germany, Austria, Belgium) or *regional* (Spain, Italy and, in some parts of the territory, in Great Britain and Portugal) - intermediate structures between the federal and unitary state. For the opposite, the regional level has a reduced autonomy, existing only for administrative reasons or as a response to the need of implementing the EU regional policy within the *unitary states* (France, Netherlands, Greece, Ireland etc.).

The administrative-territorial structure of the EU Member States is extremely heterogeneous and comprises generally *a local level* (towns, villages) and *two main regional levels* structured, organized and named differently from country to country, for example, “Länder” and “Kreise” in Germany, “Regions” and “Departaments” in France, “Standard regions” and “Counties” in the UK, “Regioni” and “Provincie” in Italy etc. The launch of the regional policy of the EC in 1975 met the impossibility of comparative assessment of the economic situation in different regions as a basis for Community intervention to correct regional imbalances. Therefore, to ensure comparable statistics at European level, the EU has developed and regulated The Nomenclature of Territorial Units for Statistics (NUTS) (European Commission, 2003), a standard of geographical coding regarding subdivisions of the States defined for statistical purposes, instrumental in the mechanism of allocation of structural funds. NUTS establishes in each Member State at least three hierarchical levels: NUTS 1 (“Gewesten / Regions” in Belgium, “Länder” in Germany, “Continente”, “Região dos Açores”, “Região da Madeira” in Portugal, “Scotland, Wales, Northern Ireland”, “Government Office Regions of England” in the UK), NUTS 2 (“Provincies / Provinces” in Belgium, “Regierungsbezirke” in Germany, “Periferies” in Greece, “Comundidades y ciudades autónomas” in Spain, “Régions” in France, “Regions” in Ireland, “Regioni” in Italy, “Provincies” in the Netherlands, “Länder” in Austria), NUTS 3 (“Arrondissements” in Belgium, “Amtskommuner” in Denmark; “Kreise / kreisfreie Städte” in Germany, “Nomoi” in Greece, “Provincias” in Spain, “Départements” in France, “Regional authority regions” in Ireland, “Provincie” in Italy, “Län” in Sweden, “Maakunnat / landskapen” in Finland). The heterogeneity continues at the level lower than NUTS 3 as well, of the ‘small administrative units’: “Gemeenten / Communes” in Belgium, “Kommuner” in Denmark, “Gemeinden” in Germany, “Demoi / Koinotites” in Greece, “Municipios” in Spain, “Communes” in France, “Counties / County boroughs” in Ireland, “Comuni” in Italy, “Communes” in Luxembourg, “Gemeenten” in the Netherlands, “Gemeinden” in Austria, “Freguesias” in Portugal, “Kunnat / Kommuner” in Finland, “Kommuner” in Sweden and “Wards” in the UK etc. (European Commission, 2003b, 2008, 2011).

Therefore, for the European Union, the need for choosing a standard unit, as the basic unit for its regional policy is more than obvious. It was elected *the development region - standard unit* with an average size of 13,000 square kilometres and a population of approximately 2.5 million inhabitants, i.e. the intermediate level – NUTS 2. According to the EC, the development region *should not necessarily have an administrative character*, but it was compulsorily created in all EU Member States in order to allow comparability, harmonization of regional statistics of member countries, performance of analyses at a regional level within the EU and elaboration of Community regional strategies, policies and programs. The competition to attract structural funds triggered in time, as, in fact, the EC foresaw initially, a tendency to amplify competition not so much between Member States, but between regions of the same state or of different states, led to the occurrence of new regional actors such as associations of regions, independent from the national states, and of the phenomenon of regional lobby. At Community level, the emergence in 1985 of the Assembly of European Regions, and in 1992, by the Treaty of Maastricht, of the Committee of the Regions, are clear elements in promoting and strengthening the status of regions.

Far from being able to speak about regions as homogeneous entities in the EU, although the definition of region is not a subject of this paper, we shall however note the existence of numerous critical voices which argue that there still is no operational definition of region, from a political, juridical and administrative point of view, at the EU level, that the region is not yet and will not be any time soon at a general level in the EU, an administrative-territorial entity endowed with political representativeness. Therefore, at the EU level, *the regional decentralization* can be described better watching the process of *regionalization*, which according to the typology of particular State, may be linked to *existing regions* as administrative-territorial units or *regions created* as new territorial divisions. Analysing comparatively the regionalization as a process aimed at developing regions as entities located immediately below the central state and above the local (sub-national and supra-local) in the 27 EU Member States (Chirleşan, 2007; Diez, 2006; Stănciulescu and Androniceanu, 2006; Androniceanu and Stănciulescu, 2001), we can distinguish five *types of regionalization*, as follows:

a). *Administrative regionalization (easy administrative decentralization - by deconcentration)* is the type of regionalization resulted from the transfer by a state to *local authorities or bodies directly subordinated to the central government* of certain tasks regarding the promotion of regional economic development by mobilizing local communities and economic organizations. In most cases, administrative regionalization is a response to the need to implement the EU regional policy. The administrative regionalization characterizes at present, at the EU level, as a rule, *the unitary states*. Among the EU15 Member States, we can note Greece (where 13 *administrative regions* were formed, responsible for regional development, led by a *secretary general of the region* assisted by an *Advisory Regional Council* consisting of representatives of local communities, in each administrative region existing a so-called *House of regional development*), Portugal (where there were formed *five regional coordinating commissions* responsible for the implementation of the regional development plan under the authority of government), the UK, except Scotland (known as a “*centralised model*” characterized rather by tendencies of centralizing than of decentralizing, the importance given to the regional level began to increase after the recognition of the political-administrative autonomy of Scotland, Wales and Northern Ireland) and Sweden (the regional level has rather little relevance as compared to the local level, traditionally very strong in the “*state of consensus*”, the administrative regionalization appears here under the form of delegating attributions of regional development to a *district governor* assisted by an *Administration Board* in which local interests are represented; in addition, regional competences include, primarily, the management of health services and of the system of

education). The administrative decentralization also characterized the following New Member States: Bulgaria, Estonia, Latvia, Lithuania, Slovakia and Slovenia and knows also a great variety of forms. For example, in Estonia there is only one Estonian Regional Development Agency, the administrative regionalization is not reflected by the existence of administrative units or administrative regions, but by the fact that state's regional development policy is implemented in the 15 *districts* by a *governor*, in Lithuania – the policy of territorial planning and regional development is managed by a *governor* at the level of the higher administrative units of *provinces / departments*, in Slovakia there are 8 *regions* and 8 *offices* of regional administration responsible for coordinating the activity of the local communities in terms of regional development. Luxembourg falls into this category as a particular case; due to the small size of the state, the four regions created do not need own institutions.

b). *Regionalization by cooperation between existing local collectivities (average administrative decentralization - by delegation)* is the type of regionalization by the agency of decentralized institutions within the local authorities, the functions of central government in the field of regional development being taken by the existing local collectivities. Unlike administrative regionalization, regionalization through existing local collectivities supposes effective transfer of competences from central government to the regions created as institutionalized forms of cooperation between territorial collectivities. This type of regionalization is limited both in terms of resources and of competences and institutions. At the EU level, this type of regionalization characterizes the *unitary states* – Denmark (14 *provincial communes*), Finland (20 *regional councils* and the so-called *unions of communes*), Ireland (8 *regional authorities* and several *specialized agencies*) and – from the New Member States – Romania (8 *development regions* established by law, by voluntary cooperation of the counties, without legal personality and not being administrative-territorial units, a Regional Development Agency existing at the level each of them) and Hungary (originally there were created 8 administrative regions, which were abandoned in 1994, their functions being taken over by the *provinces*, which may cooperate voluntarily with other provinces through *regional development councils*). There is a particular case - Germany, a federal state characterized by *internal administrative regionalization* at the level of the lands (cooperation between local collectivities within the lands).

c). *Regional decentralization (advanced administrative decentralization and average economic and fiscal decentralization)* supposes the formation of regions as new territorial collectivities superior to the existing ones, whose competences regard the regional development. This type of regionalization involves changing the administrative organization of the territory by the emergence of a *new territorial-administrative category - the region*, of the same juridical form as the existing ones, but which is part of the constitutional order of a unitary state. This type of regionalism is characterized by the absence of legislative power, administrative competence extended to fields related to regional development and fiscal power that varies from case to case. At the EU level, this form of regionalization characterized France (“*unitary state in the process of decentralization*”, France currently has 25 *regions*, constituted as autonomous communities, as a result of decentralization of public administration and benefiting from the principle of free administration of local authorities, led by a *Regional Council* elected by universal, direct vote, the competences transferred to the regions following the decentralization process were the territorial planning, the professional training and the transportation infrastructure), Sweden (characterized by a strong tradition of local autonomy, has 20 *regions*, led by a *regional government* that implements the policies decided by the government, which have their own competence in managing municipal hospitals) and as for the New Member States - Poland (16 *provinces*, whose leader controls the respective local community), the Czech Republic (the

formation, under the Constitution, of territorial collectivities of a higher level, in the form of 3 *regions*).

d). *Political regionalization (political decentralization or the so-called “regional autonomy”)* adds legislative power to the regional decentralization. *The regions* have legislative power exercised by a *regional assembly* and in order to exercise competences an executive body is constituted, which has the features of a *regional government*. The competences of the region are much broader in this case and are defined and guaranteed by the Constitution of the unitary state. The regions are not countries and do not have a Constitution and usually do not participate in the exercise of legislative national power by their own representation. This type of regionalization affects the state’s structures. In the EU, it is characteristic to the so-called *regional states* - characterizing the whole territory in Spain (the right of autonomy of the *regions* is recognized and guaranteed by the Spanish Constitution – the state’s structure is based on the indissoluble unity of the Spanish nation and also on the recognition and guarantee of the right of the regions’ autonomy), Italy (under the Constitution of Italy, the Italian Republic, unique and indivisible, recognizes, at the same time, the autonomy of *the regions* by adapting legislative principles and methods to the requirements of autonomy and decentralization, the regions have the power to adopt primary legislation and enjoy financial autonomy) or only certain parts of the territory in the UK (Scotland in particular) and Portugal (the islands). This type of regionalization does not characterize, currently, any of the New Member States.

e). *Regionalization by federal authorities (federalization)* is characteristic to the *federal states*, which were born as unions of states, therefore, *the regions*, in this case, are *states*, political entities, which have a series of regional and ethnic features. Unlike political regionalization characterized by an asymmetry of institutions and competences, the federal state supposes equality in the rights of the member states. At the EU level, this form of regionalization characterizes Germany, Austria and Belgium. While the building of the modern state in Germany and Austria was done through federalism, in Belgium regionalism led to the federalization of the state, in order to allow the formation of a structure that shall ensure greater autonomy to the component units (the case of Flanders), which will progressively accede to the quality of a state. The model of federalism that characterizes Germany is called *cooperative federalism* in which power is distributed among three levels: federal, statal (Länder) and local (regions, cities and communes), the relations between these levels being relations of cooperation dominated by the idea of “*administrative intermingling*” of tasks and competences. From a fiscal point of view, all territorial levels participate to the tax collection to the extent to which they are also responsible for the expenses. As in Germany, in Austria the lands benefit from more competences and resources, their main function being the implementation of public policies, with the distribution of competences between the federation and the lands and the strengthening of the lands’ position being permanently debated.

Obviously, this last form of regionalization, due to its high level of decentralization and territorial autonomy, answers better, in terms of functionality and stability, to the complexity of *European governance*, the functional adaptations on levels (supranational - federal - state - regional - local) are more easily absorbed by the federal structures. This leads, however, to a series of wrong approaches, the federalism being considered an expression of regionalization or a response to regionalism as opposite to the Nation-State. The main concern in the EU is that *the combination of federalism and regionalization* affects the *territorial integrity*.

Conclusions and future concerns

What we aimed at in the start of this approach - a comparative analysis of the experiences and tendencies of decentralization at a regional level in the EU - led us to formulate the following conclusions:

- In the EU countries, *the regional level* covers various political and administrative realities, being the result of a process of *decentralization* that combines the specificity of the organization of the state's power in relation to the territory and the historical evolution of that state with the European Union's requirement, that of the existence of an administrative level inferior to the national level but higher than the local one.
- The *regional decentralization*, typical to France, and embraced by Poland and the Czech Republic, from the New Member States, is an exception rather than a rule in the EU.
- At the EU level, the *regional decentralization* can best be described following the process of *regionalization* which, depending on the typology of a certain state, may be related to the *regions existing* as administrative-territorial units or to the *regions created* as new territorial divisions.
- The most common type of regionalization in the EU27 is the *administrative regionalization* (Greece, Portugal, United Kingdom except Scotland, Sweden, Bulgaria, Estonia, Latvia, Lithuania, Slovakia, Slovenia), followed by the *regionalization through existing local collectivities* (Denmark, Finland, Ireland, Romania and Hungary), which represent rather functional responses to the EU's requirements in order to allow absorption of funds allocated under the regional policy.
- The more advanced forms of regionalization - *regionalization by federal authorities* and *political regionalization* - characterize only 7 Member States of the EU: Germany, Austria, Belgium, Spain and Italy, Portugal (for the islands) and United Kingdom (for Scotland).
- The relationship *federalism - regionalization* responds better to the *European governance* of the *network type* and of the *multi-level type*.
- The expansion of *regionalization* in the EU is favoured by its approach as an *opportunity of regional development* and the blockages of regionalization are related to its approach as a *threat for the territorial integrity*.

Consequently, our future research efforts will focus on identifying and analyzing in detail some models of best practices that have proven effective in the EU for the regional growth and development.

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THE INTEGRATION OF YOUNG ECONOMISTS ON THE LABOUR MARKET. THE PROFESSION OPTION – A DECISION FOR CAREER AND FOR A LIFESTYLE

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Knowing the importance of the integration process of graduates of higher economic studies on a labour market that is becoming more and more demanding, as well as the fact that professional objectives realistic defined represent an essential demand of performance, the present paper aims to determine the relevance of personal decision capacities as a favouring factor of a concrete career option for economist students.

Our research is based on information and statistical data obtained through applying tests and questionnaires on economist students from licence and master studies from three universities: University of Oradea, The West University of Timișoara and “Ștefan cel Mare” University of Suceava, in the project called PRACTeam „The practice of economist students. Inter-regional partnership on the labour market between universities and the business environment” Project co-financed through the Social European Fund, Through the Operational Program Human Resource Development 2007 – 2013 – „Invest in people!”.

In essence we leave from the premises that the professional option reflects a specific side of individual’s personality which does not choose only for a certain occupation but, implicitly for a certain lifestyle. As a diagnosis approach we assume axiomatic the thesis according to which the high level of congruence between the individual psychological availabilities and the occupational environment raises the satisfaction chance and professional success.

The approach that we submit is an interdisciplinary one, as well as the research team formed of two economists and a psychologist. Our study proposes to identify the correlation between the individual decision ability of the subject and the compatibility between a specific interests set of abilities identified on the basis of individual tests. Also, on the basis of processing the results obtained of economist students at the personality tests, we will try to argument explaining the option of some subjects for professions that demand individual qualities that their personality does not imply at the level asked.

Key words: labour market, profession option, economist students, career

JEL Codes: J01, A11, M50, A20

The psychological perspective over young people’s integration on labour market. Individual abilities, occupational environment and career decision

The compatibility between profession and person has been theorised according to some classical models leaving from some common elements of observation, that consider the fact that people are different and work environments are diverse, that the individual option is guided on the basis of determination of a specific set of abilities and interests with the help of some psychometric tests. The model of „matching” between the person and the work environment has been extended by the authors such Rodger (1952), in England or Holland (1959, 1973, 1985) in USA, who observed that between the occupation of a person’s and profession there are often differences that reflect equally a personal option and also the general state of the art of the society and especially a certain economic conjuncture. The application of those models takes to the conclusion that it is

normal that between the profession (qualification) that a person acquires through study and the occupation of that person exists a consistent continuity.

On the labour market, once ending the training, graduates of diverse educational cycles are confronted with the need of exploring the workplace offer. Generally speaking, the choice of a profession is made on the basis of some descriptions of the teaching system components and of the organizing ways. After the accumulate preparation and certificates students make personal career scenarios.

In order to acquire a best insertion of work force on the labour market the graduates and the holders of professional certificates must inform as exactly as possible regarding the occupational alternatives. Usually the occupational information allows individuals to affine the occupational alternatives congruent to the interests, values and abilities proved during the studies. Also, occupational information allows familiarisation to the labour market, the evaluation and identification of negative and positive aspects in order to mend the perceptions of stereotypes about certain occupations. In essence, the information about certain occupation refers to: educational requirements, needed competences and tasks, the nature and environment of the work place, work schedule, the wage standard, the statute offered, lifestyle imposed, promoting opportunities, diverse aspects regarding the professional ethics and respectively the current demand on the labour market (Lemeni & Negru, 2008).

Theoretically, we can consider the career decision as “the process that leads to the selection of a career alternative from the amount of choices available at a certain moment” (Lemeni, 2008). The literature in the field distinguishes three components that interact in the career decision: decision content, the decisional process and the context of the decision.

We can identify a series of individual differences regarding the way one chooses a career. Evaluating the alternatives we observe different decisional styles. There have been identified, on theoretical level, several classifications of the decisional styles. Therefore, we admit that we might have at least the following possibilities:

- rational style (logical and organised approach of decision on the basis of some sprung plans);
- dependent style (the choice is done leaving from advice and directions from closest people);
- avoiding style characterised through postponing;
- intuitive style based on impressions and moment impulses;
- spontaneous style (without deliberations, the decision is rather passionate).

It is obvious the fact that for decisions with long term implications, such as the career decisions, the rational style is the fair solution.

Methodological aspects. The analysis of individual capacities and career decisions of economist students

Baring in mind what we have shown earlier, our study tries to clarify the proportion that is born between the context of decision and its content. Regarding the context of the career decision, we look for explanations considering internal and external factors that influence the complex decisional process.

Internal factors represent the conditions that facilitate individual option for a certain educational and occupational trajectory. In our study, internal factors have been quantified on the base of *measuring the self knowledge of subjects* (interests, values, habits and personality characteristics), *the evaluation of decisional abilities* especially the capacity of correlating self knowledge with the professional and occupational offer. Also, the decisional abilities have been qualified through reporting to the individual’s capacity to analyse alternatives, to take into account and the certainty of the individual that he disposes of consistent means to choose the most appropriate option for himself or herself.

Regarding *the extern context*, we used as a theoretical modelling element a situation reflected by elements that have been identified on the labour market at the present moment. The structure of

opportunities has been modelled into the perspective of jobs in economic field that the labour market offers to students and graduates of economic studies.

As a research method we used questionnaire, applied to a number of 189 students and graduates of economics, participating in the PRACTeam project.

Our study aimed to measure for the tested subjects *the decisional capacity indicator* using a Likert scale from very weak to very good. In order to identify the items there have been used the following instruments:

- decisional ability test (evaluates the rationality of the decision maker, consists of 14 items that describe decisional situations and present alternatives for which the subjects choose, the items being formed as possible choice situations);
- Interest evaluation questionnaire (IEQ) (evaluates the preference of a person for a certain activity or area of knowledge, it is formed of 60 items, grouped in six correspondent scales, to the six groups of interests from Holland's theory: realistic, investigative, artistic, entrepreneurial and conventional).

The hypothesis that we need to statistically validate is that individuals with a high decisional capacity (good, very good), correlate significantly with the set of specific interests and aptitudes determined on the basis of individual tests and personal option for a professional track in economic or other field. In a first phase, the results obtained at the IEQ (objective measure of individual capacities), in terms of a combination of three characters according to the Holland's classification code, has been confronted with the manifested, clear, asserted professional option as a choice of one of the economic specializations: International businesses; The economy of commerce, tourism and services; Finances and banks; Accountancy and stock control informatics; Management and Marketing (to be seen *Table nr. 1 The distribution of subjects according to the preferences for certain economic fields*).

Table nr. 1. The distribution of subjects according to the preferences for certain economic fields

Specialization	The first result on types of jobs according to Holland classification						Total
	Entrepreneurial	Conventional	Social	Realistic	Investigative	Artistic	
International businesses	8	9	11	0	0	0	28
The economy of commerce, tourism and services	9	7	15	1	1	1	34
Accountancy and stock control informatics	2	22	5	1	0	0	30
Finances and banks	4	18	7	0	2	3	34
Management	14	7	5	1	1	0	28
Marketing	10	10	10	1	1	3	35
Total	47	73	53	4	5	7	189

As it is shown in Table nr.1, the distribution of subjects is kept in the expectance horizon created on the basis of common perception over the competencies that are offered to graduates through the specialisations chosen. Students who have chosen International business are grouped in the area of social (11), entrepreneurial (8) and conventional (9) posts. They are aware of the fact that the specializations that they have chosen implies intense interpersonal relationships and

communicating with people (descriptors of social post) managerial and organizing abilities, the capacity to make decisions and assume risks (descriptors for the entrepreneurial post). The polarization in the area of conventional post might seem a paradox in this context, but their orientation towards success implies a realistic passing from working with ideas towards practical manipulation of some concrete data and details from an organised frame.

Management specialization has the options concentrated according to the expectancies in the area of entrepreneurial posts (14) while students in the Accountancy and stock control informatics as well as Finances and banks chose in majority (22 out of 30, respectively 18 out of 34) for conventional posts. Their preference for rigorous checking routines and their bent for organized work through procedures reflects a specific coherence between the subjective set of expectancies regarding own career and the nature of tasks that they are going to effectively fulfil.

Overall, we conclude that the distribution of the subjects confirms the existence of a common mentality *pattern*. We expect intellectual dynamism, advanced communication skills and good negotiation skills from an International businesses specialist. Accountancy implies rigour and inclination towards routine, availability to procedural acting and fulfilment of routine tasks. The specialization Economy of commerce, tourism and services takes the weight centre of preferences in the direction of social posts, where the accent falls on communication with people, helping people and providing services to them.

Table nr.2. Correspondence between the level of decisional capacity and the choices in favour of some professions associated to the field

Specialization	Total respondents/ specialization	Scores at the decisional capacity GOOD and VERY GOOD	Holland codes/ professions associated to the field ⁴⁹
International businesses	28	10	ACR
The economy of commerce, tourism and services	34	24	ACS
Accountancy and stock control informatics	30	19	CIA
Finances and banks	33	16	ASC
Management	27	7	ISC
Marketing	35	17	AIC

As we can see in Table nr.2 and Table nr.3 regarding the distribution of decisional capacity on specializations, the most relevant correlation between the decisional capacity, personal qualities and the specialization chosen appears in subjects enrolled at specialization Economy of commerce, tourism and services. Also, relevant figures appear for the specializations Accountancy and stock control informatics (19 out of 30 subjects proves good decisional abilities), Finances and banks (16 out of 33) and Marketing (17 out of 35). The students, who follow specializations in fields with a clearly defined occupational area, prove better decisional abilities, they choose following well defined objectives and their expectancies regarding their own career prove to be more realistic.

The low scores obtained in the case of specializations International businesses and Management, explain through the relative attractiveness of the areas with new opportunities of self development. The two fields are suitable to occupational areas much more diverse, fact that

⁴⁹ Holland Codes/professions associated to the field: ACR – entrepreneurial, conventional, realist; ACS – entrepreneurial, conventional, social; CIA –conventional, investigative, entrepreneurial ; ASC – entrepreneurial, social, conventional; ISC –investigative, social, conventional; AIC –entrepreneurial, investigative, conventional.

creates the general impression of large opportunity. In fact, on a real labour force, these specializations do not have a large opening. The possibility to employ economists in the field of International businesses is in expansion, but the field still remains an exclusivist one and the chance to employ comes from an equation with quite many variables. The lowest score (7 out of 27) register students enrolled in Management, which is quite surprising. These scores can be attributed, in our opinion, to the obscure significance of management term at the level of common sense and in the context of managerial deficit that regional economy is confronted with. The candidates apply to these specializations on the basis of some choices determined by extern factors (parent's wish, diverse preconceptions regarding what they think "a manager is") and under the pressure of a subjective "mythology" tagged of many preconceptions.

Table nr.3. Data regarding the decisional capacity distribution according to the specializations

Specialization	Decisional capacity					Total
	Very weak	Weak	Medium	Good	Very good	
International businesses	4	5	13	5	1	28
The economy of commerce, tourism and services	3	6	19	4	2	34
Accountancy and stock control informatics	3	6	18	2	1	30
Finances and banks	8	7	15	4	0	34
Management	2	8	12	5	1	28
Marketing	5	8	13	7	2	35
Total	25	40	90	27	7	189

The statistical processing of results validates the hypothesis analysed. We can identify a significant correlation of high scores obtained by subjects at the decisional capacity test, and a relative correspondence on the area of correlations between the personal set of interests (determined on testing with the interests questionnaire - IEQ) respectively the option for a specialization or another. In a concrete way, students who have obtained high scores at the decisional capacity test (to be seen *Table nr.3. regarding the distribution of scores obtained at the decisional capacity tests according to specialisations*) are enrolled in specializations that imply interests and aptitudes in consonance with profession descriptors associated to the license that they are going to obtain.

Conclusions

As a conclusion, the difficulties encountered in the decisional process of subjects seem to be determined firstly by a series of irrational beliefs (myths) regarding the choice of a career and especially of the inconsistency of information about themselves or about opportunities. Obtaining some clear information and not contradictory about themselves can be partially realised with the help of specialists in human resources.

As the data processing reveals, a significant part of subjects obviously operate influenced by contextual pressures derived on one side from elements that regard economic realities (labour market offers important opportunities to fructify education in entrepreneurial field), as well as influenced by a common set of preconceptions. It persists the idea that economic studies offer an easy enclosure on the labour market and, often, individual option is determined by advices and

incentives of some persons with presumptive authority (parents or close friends). Between those, dominates the preconceptions according to which occupation that they will have after graduating from university will be in direct relation to the license obtained at graduation. But on the real market of workforce, the transition proved by the power of evidence that several diplomas does not automatically mean more competence. The tendency to value exclusively and in a narrow field academic education is a not adjusting belief: we must admit and take decisions remembering the fact that the relation between educational programmes and workforce market is not clearly and univocal determined in all fields.

Entrepreneurial occupations, as it results from our data are marked by a relative difference of phase between the university specialization chosen by the subject and the type of occupational interests that resulted after testing. These discrepancies, associated with a low decisional capacity take to choices influenced by conjuncture. The subject chooses the specialization ignoring the personal set of qualities and real interests as he is confronted with a severe need to maximise chances to occupy quickly a place on the an extremely restrictive labour market. The identification of a groove, the opportunism and the failure fear (specific data of an unfavourable economic context) determine the subjects to primary take into account external factors. The global economic crisis and post-transition effects that manifest on the Romanian labour market are arguments that allow interposing conjuncture options in the horizon of normality. Even more, the dynamics of workforce demand represent an important signal for higher economic education regarding the large dispersal of the fundamental field Economic Sciences in too many specializations, in our opinion, at level of BA programs in the conditions in which general economic education and interdisciplinary education seem to be more appropriate formulas in the context of the labour market dynamism.

The current paper presents the preliminary research results in a field that we discover and consider as being fascinating and of real importance and actuality. Our future approaches will be headed to define a set of proposals of measures, strategies, politics destined to higher economic education in order to facilitate the integration of young graduate economists on the workforce market and monitoring the entrepreneurial professional track of economist graduates.

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DYNAMICS ECONOMIC DISPARITIES IN NORTH-WEST REGION OF ROMANIA

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Even though over the years has enjoyed wide media coverage, with highlighted aspects, discrepancies and inequalities of economic potential between different regions of the world, or even parts of the same countries always remained topical. Difficulties arising from these differences were always felt, extremely painful by humans.

Analyzing distinctly, participation of each county to the GDP of the Northwest Region and the composition of all indicators, we can identify significant discrepancies between counties, regions and municipalities. This is one of the reasons that led us trying to identify the causes that generated the current situation. From the perspective of the contribution of each county in the Northwest Region to Region's domestic product composition, the first place is taken by Cluj county 32.3%, followed by Bihor with 24.3%, Maramures, with 14.9% Satu-Mare, 12.1%, Bistrita-Nasaud, 9.1% and 7.2% Salaj. Consulting of the Regional Operational Programme 2007-2013 indicates that the poorest areas in the Northwest Region are in Maramures and Bistrita-Nasaud.

An important part of the active population of North-West Region was employed in public enterprises and an increase of unemployment in the counties of Salaj, Satu Mare and Maramures became predictable, imminent amid restructuring of public enterprises with losses. Studies of employed population by sectors of the economy, shows a high rate of population employed in services in the counties of Cluj and Bihor and high employment in agriculture on other four counties. In a modern market economy, services are most concentrated labors, and how the workforce is distributed in the Northwest region also shows an imbalance. How Northwest Region is participating in international economic cycle has major effects on the population's living standards. Relevant for the inter-district disparities analysis is the human and agents behavior analysis and the savings and loan relationships. How people behave in these ratios in each county tells us much about their economic profile.

Attenuation of long distance gaps in the Northwest region remains a very complex problem, attempts to decrease it, is bringing into question, not infrequently contradictory strategies. Supporting the few remaining state-owned enterprises in the region could lead to a revival of activity, attracting attention of foreign investors can thus lead to recovery of much of the labor resources of the Region. Expansion and modernization of transport and distribution networks would provide a further chance to faster development of the North-West by exploiting the growing regional economic resources available, enhancing economic relations both intra and extra regional.

But we can not fail to mention the part state should play in orchestrating these measures. Despite the independence of regions, they are subordinated to the central administration, and strategic investment policy depends to an overwhelming extent of it. Only by linking effective measures at national, regional and local level will alleviate the sustainable economic gaps.

Keywords: disparities, restructuring, reforms, investments, consequences

JEL: E01, E24, J11, R12, W24

The issue of disparities and inequalities of the economic potential existing between different regions of the world or even between regions of the same countries always remained valid, despite the fact that over time it has received wide media coverage. Difficulties arising from these differences were always felt particularly painful by humans.

Currently, the economy is characterized by an increased mobility of all its components, and economic disparities have begun to worry more and more economic researchers. As a result, simply finding the economic disparities is not satisfying anyone anymore. Maybe that's why people who believe that it is necessary to identify the necessity to maintain and deepen the gaps identified cases depending on the particularities and specificities of each area. It must also decipher their consequences, because they are not limited to the current period, but designing, influencing economic relations on a longer period. In the spirit of the statement we want to present an analysis by geographical regions, North-West of Romania. Among the envisaged objectives we include: identifying the causes of economic disparities emphasis of inter-county geographic area North West of Romania, which are the economic effects of these inter-district disparities

According to information provided by the Regional Development North West Agency, the North-West region (northern Transylvania) is close to European markets, with good road access, rail and air has a strategic geographical position, being the gateway to Romania from the European Union and Ukraine. Even if the region is crossed by 7 European roads, has peripheral position over the European transport corridors, the connection with eminent poles in the neighborhood, with other regions is still difficult. According to the same sources, the North-West of Romania has an area of 34,159 km² representing 14.3% of the total area of the country. Part of this region are the counties: Bihor, Bistrita-Nasaud, Cluj, Maramures, Satu Mare and Salaj having a population of 2,744,914 (14.32% of the total population of the country) and has an average density of 80.1 inhabitants per square kilometer. For that is the number of administrative-territorial units (421), distributed as follows: 42 cities including 15 municipalities, 398 communes and 1823 villages.

Analyzing separately each county participating in the formation of regional GDP and the composition of the indicators, we can identify significant discrepancies between counties, regions and municipalities. This is one of the reasons that led us trying to identify the causes that generated the current situation.

From the perspective of contribution each county has in North-West Region's domestic product formation, first place is taken by Cluj county with 32.3%, followed by Bihar with 24.3%, Maramures, with 14.9% Satu-Mare, 12.1%, Bistrita-Nasaud, 9.1% and 7.2% Salaj. Consulting of the Regional Operational Programme 2007-2013 indicates that the poorest areas in the Northwest Region are in Maramures and Bistrita-Nasaud. Here were identified most areas of industrial decline. Intra-regional differences are closely related to the degree of industrialization, the counties most powerful and industrialized early - Cluj and Bihor - having a high proportion of the employed population (44.5% and 45.7%), while less counties and later industrial - Satu Mare and Bistrita-Nasaud - have lower weights (39.6% and 38.0%). Un-industrialization has led to a restricted job use in industry in counties of North-west, but with large differences from one area to another.

Table 1 Unemployment in North-West

	2007	2008	2009	2010
Bihor	2,4	3	5,8	5,8
Bistrița	2,4	2,8	8,2	6,3
Cluj	3	2,9	6,3	4,9
Maramureș	3,4	3,7	6,4	6
Satu Mare	2,6	3	6	6,3
Sălaj	4,4	5,5	10,3	8,2

Made by author based on information found on the website:

<http://www.insse.ro/cms/rw/pages/buletinStatJud.ro.do>

An important part of the active population of North-West Region was employed in public enterprises and an increase of unemployment in the counties of Salaj, Satu Mare and Maramures became predictable, imminent amid restructuring of public enterprises with losses. Other areas in decline are: the Apuseni Mountains and the northern mountain area. Mining sector restructurations has affected this sector and led to massive layoffs in the area of Baia Mare-Borsa-Viseu.

A lower number of unemployed in Cluj and Bihor to the major foreign investment, which have diminished, even partially, the effects of industry restructuring. North-West has attracted a relatively high number of firms with foreign participation, sometimes grouped in clusters (eg major foreign investors in Bihor County - primarily producers of technological equipment). But we can observe that they are generally SMEs, who often work as subcontractors or contract work or operate based on business ties, traditional Western Europe. It should be noted that SMEs present in the Northwest region of the country accounts for 15% of the national total. The existence of foreign investors to operate in the same field at the same time can create both advantages and disadvantages. On Bihor 's labor market multinationals had a visible contribution to the unemployment rate and the constant increase in demand for qualified manpower, services development.

Studies of employed population by sectors of the economy, shows a high rate of population employed in services in counties of Cluj and Bihor and high employment in agriculture on other four counties. In a modern market economy, services are most concentrated labors, and how the workforce is distributed in the Northwest region also shows an imbalance. Counties in which the employment of labor resources is higher in services, like Cluj and Bihor, also raises the level of economic development compared to other counties.

The presence, quite shy, of industrial parks in the Northwest Region counties, and also their unequal distribution in the Region, is supplying the gaps. We notice the early existence in Cluj County of three industrial parks: Tetarom1 Cluj-Napoca, Cluj Napoca Tetarom2 , Dej ARC Park, which attracted investments of hundreds of millions of euros. A significant impact on the local economy has the making of the industrial park of the Finnish giant Nokia (Tetarom3), Nokia investment reaching half billion euros. Existence in Bihor county of those two industrial parks, one located in Oradea and one in the west of the county, between Oradea and the border with Hungary, has created a domino-type effect, attracting other foreign investors and companies. So Shin Heung Precision of Korea, U.S. Plexus that made investments of over EUR 20 million and a Canadian company that produces equipment (Celestica) made an investment of over 84 million, those 3 assuring to employ over 3,000 people. In other county we could see 25 million euros invested by the French company Michellin in a tire factory in Zalau, the Natuzzi Italian corporation in a furniture manufacturing facility in Baia-Mare in the amount of 40 million euros in Satu Mare Schemmer German company has invested 10 million euros in the production of tubes for cable protection, and in Bistrita-Nasaud a germany company Leoni Wyring System's

presence is noted, producing automotive wiring, but also companies with Italian capital such as Tesitura, Italtexil and Storia, active in textiles field. In all counties in the region, except Bistrita-Nasaud, industrial parks have been established.

The top foreign investors in the county of Cluj is the leader of the Region, and placing their capital where conditions exist for achieving higher returns. All these elements lead to the development of the labor market, bringing financial resources, significantly reducing the unemployment rate, while generating an increase in GDP per inhabitant (Table 2).

Table 2 Average monthly wage

	Salariați (raportat la totalul populației) (%)	Salariul mediu net lunar(euro)	PIB (pe cap de locuitor)
Bihor	27,3	249	5550
Bistrița	19,2	261	4712
Cluj	28,5	345	7100
Maramureș	17,8	235	4090
Satu Mare	19,5	259	4459
Sălaj	17,6	265	4337

Source: National Commission for Prognosis <http://www.cnp.ro/ro/prognoze>

In the Northwest Region, we noted important differences between the counties both in terms of number of employees compared to the total population, the net average wage, and GDP per inhabitants. A cause of this situation may be the preference of investors to place capital in more developed counties, such as Cluj, at the expense of others. Another effect of the existence of gaps in the North West is population migration. If the external migration is already well known, became a phenomenon very carefully studied by the European institutions, migration between counties in the Region being seriously considered, to my knowledge, until now.

Relevant inter-district disparities analysis is to analyze the behavior of the population and the savings and loan relationships. How people behave in these ratios in each county tells us much about their economic profile.

The information presented in the table 3, allows us to identify different behaviors for each of the counties residents regarding loans and deposits. As expected, most of the loans (in absolute value) are in the county of Cluj, followed in order by Bihor, Maramures, Satu Mare and Bistrita-Nasaud. Perhaps more relevant is the percentage of outstanding loans, Cluj and Satu Mare, where only 9.8% and 9.1% of total loans, Bistrita-Nasaud most delicate position having 18.2% of total loans, while the values of Bihor and Maramures 13.2% and 11% standing in the middle somewhere.

Following the structure of loans, it is noted that in the Maramures home credits do not exceed 31.7% of total loans to the public. The explanation could be given by the fact that a large number of Maramures people are working abroad, money they send being used primarily to create new residential areas, so the necessary credits for this area is smaller. Cluj in turn, has the highest share of housing credits in total loans, approximately 42.44%, this being due to increased development of the area in recent years, the number of students who chose Cluj as the city of residence after graduation, relatively high price of real estate in this area compared to other areas as well as greater employment and income more consistent work performed by residents in the area. Bistrita, Satu Mare and Bihor have comparative value of real estate loans in total loans ratio, with values ranging between 34% and 36%, remarkable being the fact that in absolute value Bihor is ranked second after Cluj with a double value total loans and real estate compared to the other counties.

Table 3 Information on credit report in the Northwest Region (mil. RON)

	Total credite Lei și valută	Total restante Lei și valută	Total credite populație Lei și valută	Total credite locuinte Lei și valută	Total depozite la termen lei și valută
Bihor	6071.9	1788.5	2575.8	645.3	2395.8
Bistrița	2135.5	809	1170.2	290.3	1026.7
Cluj	9197.8	862.8	4694.9	1574.7	5583.6
Maramureș	3107.9	264.5	1445.1	305	1524.9
Satu Mare	2632.1	193.1	1099.4	266.5	1040.1

Source: *BNR – Territorial structure of non-bank loans and customer deposits*
<http://www.bnr.ro/Indicatori-agregati-privind-institutiile-de-credit-3368.aspx>

Attenuation of long distance gaps in the Northwest region remains a very complex problem, attempts to decrease it, is bringing into question, not infrequently contradictory strategies. Supporting the few remaining state-owned enterprises in the region could lead to a revival of activity, attracting attention of foreign investors can thus lead to recovery of much of the labor resources of the Region. The level of resource utilization services sector should also be carefully considered.

Expansion and modernization of transport and distribution networks would provide a further chance to faster development of the North-West by exploiting the growing regional economic resources available, intensifying economic relations both intra and extra regional.

But we can not fail to mention the part state should play in orchestrating these measures. Despite the independence of regions, they are subordinated to the central administration, and strategic investment policy depends to an overwhelming extent of it. Only by linking effective measures at national, regional and local level will alleviate the sustainable economic gaps.

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ANALYSIS OF ECONOMIC GAPS BETWEEN URBAN AND RURAL ROMANIAN AREAS

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In this paper the authors will perform a comparative analysis of the impact that the population residential areas have on the economic and social activity from Romania. Our analysis will be carried out for a time span of 10 years, between 2000 and 2009. The main purposes are to emphasize the economic gaps between the residential areas (urban and rural) and to identify the factors that determine these gaps.

The economic differences between rural and urban areas and their impact on the peoples' standard of living represent an important issue for international institutions like IFRC, UNICEF or OECD. Also, this topic represents a frequent subject in the economic literature from poor and developing countries. Studies conducted by Huong and Booth (2010), Alister, Alana and Ayele (2007), Chao, Zhidong and Mingxing (2008), Mateoc-Sîrb, Mateoc, Darvaşi and Mănescu (2008) or Sahn and Stifel (2002) are representative examples. Most of these papers focus on the living standards differences generated by the differences between income and expenditures between urban and rural areas.

To achieve our goals, we will use the statistical methods to analyze the data released by the National Institute of Statistics. We will try to find some correlations between the economic indicators – household incomes, value and structure of household expenditures, structure of household expenditures – the social indicators – residential area, education level, age and occupation. The highlight of the gaps between the rural and urban areas will be the main objective during this analysis.

We conclude that in Romania there are substantial differences between rural and urban areas. The income differences are determining different consumption patterns between rural and urban persons. In rural areas, the population is spending less in all goods and services aspect that reduce their standard of living. Anyway, the results obtained are the subject of at least two possible limits. The fact that the data series are too short may affect the results we have obtained. Also, the economic gaps analyzed represent an average for the whole country, what means that in some regions these differences may be even higher.

Keywords: economic gaps, households' incomes, households' expenditures, consumption, social indicators

JEL classification: E21, E24

Introduction

Since 2000, the macroeconomic evolutions led to an increase in the level of income per capita. Unfortunately, the differences between rural and urban area continue to be high. In Romania the population below the poverty line is about 15%, the level of rural poverty being double than the level of urban poverty. More than that, “75 per cent of poor children live in rural areas, where the poverty risk is three times higher than for children living in urban areas. Moreover, one third of these poor children live in agricultural families, with a poverty ratio seven times higher than for

children living in families with at least one employee” (IFRC 2010:1). The problem of widening disparities between regions in the case of Romania is also identified by UNICEF.

The gap between rural and urban area is a concern for the European Union policy, because rural areas must exploit their potential or risk falling further behind urban areas (OECD). Member States can use their rural development programs to deliver the priorities of knowledge transfer, modernization, innovation and quality in the food chain, investment in human capital and the creation of employment opportunities (Programul Național de Dezvoltare Rurală, 2007 – 2013).

The Transnational Co-operation Programme for a European area in transition on the way to integration "South East Europe (SEE)" 2007-2013 under the European Territorial Cooperation is significant for the regional disparities in terms of economic power, innovation, competitiveness and accessibility between urban areas and rural areas.

For Romania, within the "Operational Programme Increase of Economic Competitiveness" Programme under Convergence objective co-funded by European Regional Development Fund (ERDF), the general objective is the increase of Romanian companies' productivity, in compliance with the principles of sustainable development, and reducing the disparities between rural and urban areas.

Through the Millennium Development Goals are eradicate extreme poverty and hunger, achieve universal primary education, ensure an environmental sustainability by reducing discrepancies between rural and urban areas (UNDP).

The paper is structured as follows: the literature review chapter presents the results obtained in some representative papers on this subject, in the methodology we describe the analysis and the data used in the study, while the part with results and discussions enhances the results we obtained during our analysis.

Literature review

Using data from Household Living Standard Survey, most of articles are presenting analysis of significant urban-rural discrepancies in poor countries.

In Vietnam, the economic differences between rural and urban areas have increased dramatically from 1993 to 1998, and peaked in 2002 before reducing slightly in 2004 and significantly in 2006. The urban-rural gap increases across the expenditure distribution, the components of expenditure. Also, the differences are in education, household demographic structure, industrial structure and related returns (Thu Le, Booth 2010: 8-14).

In the study "Urban-rural inequality in Africa", the authors measure inequalities in African countries, and determine the extent to which these inequalities are a consequence of discrepancies between urban and rural areas (Sahn and Stifel 2002:12-17). The analysis focuses on living standards, the asset index, education and health. The conclusion is that the living standards in rural areas lag far behind those in urban areas. The gaps between urban and rural areas are in fact dramatic spatial differences.

The paper "An empirical research of urbanization and urban-rural gap in China: 1952-2005" presents two important problems of urban-rural relationship in China nowadays: the accelerated urbanization process and an enlarged urban-rural gap. The researchers emphasize the urban-rural income gap. There is an intensively positive correlation between urbanization and urban-rural consumption gap. The rapid urbanization results in the increase of urban-rural inequalities (Chao, Zhidong and Mingxing 2008: 404-406).

"The urban-rural divide: Myth or Reality?", a study of teachers from Great Britain presents different types of deprivation, measures of deprivation and an analysis of why urban people are more deprived than rural people (Alister, Alana and Ayele 2007:16-19).

In the paper "A study on life quality in the rural area" the authors argued with the idea that in the developed economies there is a trend to remove differences between rural and urban and starting from these premises the authors are making an analysis of the life quality in the Romanian rural

area in 2001-2007. The conclusion is that in Romania there is still a major discrepancy between rural and urban which is not beneficial for the Romanian rural area (Mateoc-Sîrb, Mateoc, Șeulean, Darvași and Mănescu 2008:118-121).

Professor Maria Vincze shows that one disadvantage of rural development in Romania is the lack of horizontal link between communes, difficult collaboration, connections between cities and unbalanced surroundings areas (Vincze 2000:7).

Methodology

In order to achieve our goal, we will focus our analysis on the following differences between rural and urban areas:

- the endowment with durable goods
- the level and structure of households' incomes and expenditures
- the structure of consumption.

The endowment with durable goods will be evaluated using a qualitative scale. We will take in consideration eleven durable goods: washing machine (automatic or no), TV (white-black or color), computer, phone (fix and mobile), refrigerator, stove, fridge, vacuum cleaner, stereo system, car and freezer. The index of endowment with durable goods was constructed using a weighted mean between the weight of each durable goods and the share of households that own these goods (out of 100 households). The value obtained will show the average endowment level with durable goods. The lowest value may be zero – which means the households do not have durable goods at all -, while the highest value may be 100 – which means that all households have all the eleven durable goods taken in consideration.

The analysis of incomes and expenditures will be realized using real values. The data series have been deflated by the inflation values, all the data (incomes and expenditures) being expressed in the prices of year 2000. Thus, the time series will reflect the real evolution of incomes and expenditures, an evolution in a situation of constant prices. The influence of other factors on incomes and expenditures evolutions was determinate using regression equations.

The quantification of educational level for the head of household is realized using a scale from 1 to 3. If the value obtained is near to 1, it means that the majority of households' heads have primary educational level; if the value is near to 2, it means that the majority of households' heads have secondary educational level; if the value is near to 3, it means that the majority of households' heads have higher educational level.

The measurement of consumption structure is realized using two types of data. In the case of agricultural products we have used the monthly quantities consumed by households (measured in kilos, liters or pieces), while in the case of services we have utilized the average monthly expenditures for each type of service. We considered more appropriate to use the quantities and not monthly values of expenditures for agricultural products in order to eliminate the prices impact. For the same reason, the monthly values of expenditures for services consumption were calculated in the prices of year 2000.

Results and discussions

Analyzing the endowment with durable goods in rural and urban areas we observed that the rural areas are less endowed than the urban areas. The index of endowment with durable goods (IEDG) has recorded high differences between rural and urban (as we can see in Figure 1), in 2009 the value of index for rural areas being approximately at the level of the

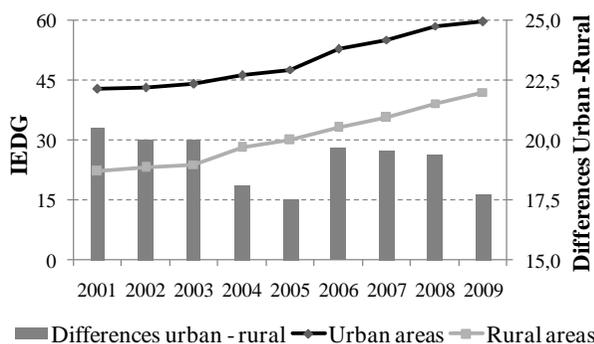


Fig. 1. Evolution of endowment with durable goods

Source: NIS and authors' calculations

index in 2001 for urban areas. Fortunately, the gap between urban and rural is decreasing slowly from 20.5 in 2001 to 17.7 points in 2009.

Analytically, the highest differences are in the case of automatic washing machines - in 2009, 79.8% out of urban households owned automatic washing machines, while only 28.8% out of rural households had an automatic washing machine - and vacuum cleaner - in 2009, 81.2% out of urban households and only 36.4% out of rural households owned a vacuum cleaner (NIS).

Even if the bathroom and the restroom are not durable goods, in the analysis of households' endowment we consider appropriate to analyze their situation. Unfortunately, the gaps between urban and rural are very big in this case also. As we can see in Fig. 2, the existence of bathroom, shower or restroom inside the house is normal in the urban areas, while in the rural areas the usual aspect is that these facilities to be outside the house.

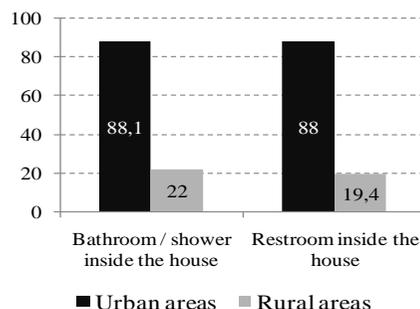


Fig. 2. The share of households by utility equipment in 2009

Source: NIS and authors' calculations

The second analysis is related to the households' incomes and expenditures. As we expected, the level of incomes in the urban areas is higher than in rural areas. The differences are even much higher if we separate the incomes in financial and material revenues. Due to the fact that between 30% - 45% out of total incomes in rural areas are in a material (natural) form, the gap in the financial incomes are even much higher: during the time span 2000 - 2009, the highest differences between financial incomes in urban as reported to rural areas was recorded in 2009, 402 lei (in the prices of year 2000. The corresponding value in the prices of year 2009 is 1039,8 lei).

The study of incomes reveals another conclusion: as income per capita grows, the disparity between urban and rural incomes increases (as we can see on the Fig. 3) - from 76.2 lei in 2000 to 270.1 lei in 2009 for total incomes, or from 151.6 lei in 2000 to 402 lei in 2009 for the financial incomes. In other words, *the economic growth recorded by our country since 2000 instead of reducing the disparities between rural and urban incomes, it has grown them.*

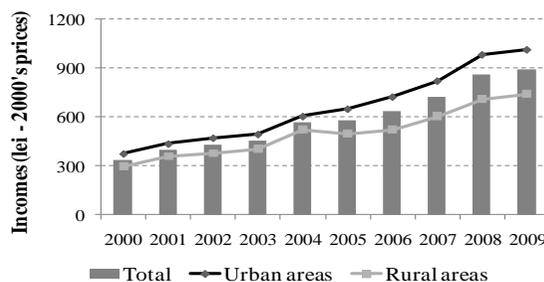


Fig. 3. Evolution of households' incomes

Source: NIS and authors' calculations

An explanation for the income gap is represented by the differences in the educational level. The educational level in the rural areas is much lower than the educational level in the urban areas. In the rural areas the majority of households' heads have primary or secondary educational level, while in the urban areas the majority of households' heads have secondary or higher educational levels. Testing the correlation between households' incomes and the educational level, we deduced that there is a statistically significant relationship between these two variables at the 99% confidence level. The equation (1) expresses the fitted model:

$$HI = 0,00338317 \cdot Ed^{18,504} \quad (1)$$

where: HI - household's income, Ed - educational level. Therefore, every time the educational level of the household's head will increase by 1%, the household's income will increase by 18,504%. In conclusion, the gap in the educational level between rural and urban represents a reason for the incomes disparities.

As in the case of incomes, the level of expenditures is higher in the urban than rural households. In the Fig. 4 we can see the evolution of expenditures and we deduce that the disparities between urban and rural increase during the time. The differences are even much higher if we separate the expenditures in financial and material. Due to the fact that between 30% - 46% out of total expenditures in rural areas represents goods and services produced in the household (in urban areas the share of these goods is maximum 10%), the gap in the financial expenditures are even much higher: during the time span 2000 – 2009, the highest differences in real terms between financial expenditures in urban as reported to rural areas was recorded in 2008, 358 lei (in the prices of year 2000. In the prices of 2008, the difference is 884,3 lei).

The disparity between expenditures in urban and rural areas is the result of incomes gaps. Testing the correlation between households' expenditures and incomes, we deduced that there is a statistically significant relationship between these two variables at the 99% confidence level. The equation (2) expresses the fitted model:

$$E = 75,0824 + 0,811866 \cdot I \quad (2)$$

where: E – household's expenditure, I – household's income. Then, every time the households' incomes will increase by 100 lei, the households' expenditures will increase by 81,1866 lei ($R^2 = 99,7574\%$).

Before proceeding to analyze the structure of expenditures, we will study the extent to which household can cover their current expenditures. The data shows us that there is no significant difference between urban and rural regarding this aspect. In general, in rural areas it is a little more difficult than in urban areas to cover the current expenditures, but the values are approximately the same. Considering the major differences in incomes and expenditures between rural and urban, the similarity in perceptions regarding the cover of current expenditures make us believe that rural households are deprived of certain goods and services.

The differences in the structure of consumption are very clear. In rural areas, the food consumption represents more than 50% out of total consumption, while the consumption of services hardly reaches to 20%. On the other side, in urban areas in the last years, the food consumption was around 40%, while the consumption of services reached 30% out of total consumption. In general, a higher share for food consumption represents a sign of low living standards. The Fig. 5 shows us that the rural households are especially deprived of services. In the majority of cases, the economic data have demonstrated that an increase in the incomes reduced the share of food consumption in total expenditures. In the last 5 years, a slowly reduction in the share of food consumption for rural areas can be observed, reduction which in our opinion was generated by the increase of incomes.

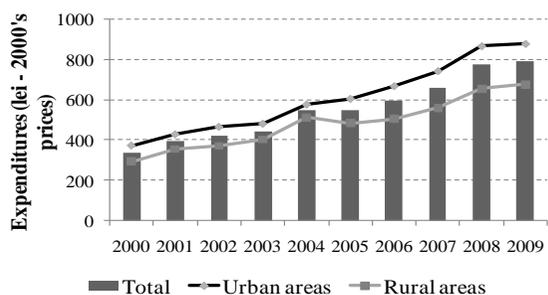


Fig. 4. Evolution of household's expenditures
Source: NIS and authors' calculations

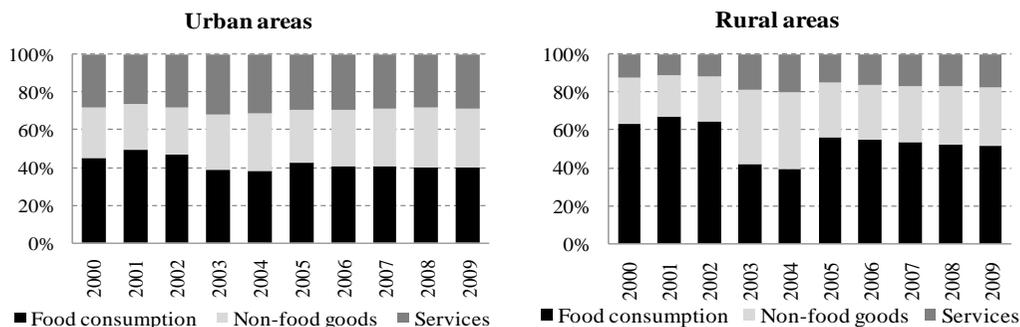


Fig. 5. The structure of consumption

Unfortunately, analyzing of which goods and services rural households are deprived, we find the highest differences in some of the most important services: health, education, cultural and recreational services. In their case the differences become more accentuated every year affecting the quality of human resource. We consider they have a negative long term impact on the development of rural areas, their evolution accentuating the gaps between rural and urban areas.

Analyzing the food consumption we have discovered also some differences between rural and urban areas. The first difference is that in rural areas the consumption of “inferior goods” - bread, corn, potatoes - is higher than in urban areas. In rural areas, the consumption of bread and corn is by 1 kilo/person/month more than in urban areas, while in urban areas the consumption of meat and fruits is 1 kilo/person/month higher than in rural areas.

The consumption of fruits records an interesting situation. In general, in rural areas, the consumption of fruits does not necessitate any financial expenses, while in the urban areas the majority of fruits consumed are bought from markets. In spite of that, the urban households are consuming more fruits than rural households. Unfortunately the opposite situation is observed in the case of alcoholic drinks: in rural areas the consumption of alcoholic drinks per persons is higher than in urban areas. Milk consumption has another interesting evolution. The rural households are considering milk as an “inferior good”, while for the urban households the milk is a “normal good”. A possible explanation is the fact that in the rural areas milk represents a common agricultural product consumed by households, while in urban area milk is less consumed.

Conclusions

As a result of our analysis we consider that in the Romania of year 2009 there are significant differences between urban and rural areas. First of all are the differences between the education level and consumption of educational and cultural services. These differences have a negative impact on the rural areas, the incomes gained by the rural households being considerably lower than the incomes obtained by urban families. As a result of income differences, the gaps in the expenditures between rural and urban households are increasing every year. We can see all this differences in the level of endowments with durable goods, in the structure of consumption and in the specific goods and services consumed.

The income differences determine the rural households to own and use less durable goods, to have the bathroom or the restroom outside the house in most of the cases, to pay for a holiday only occasionally, to spend less on health, personal care, education, water, sewerage, sanitation and utilities, to eat more bread, corn or drink more alcoholic beverages.

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MODERN FACTORS THAT ENHANCE COMPANY'S FINANCIAL PERFORMANCE

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Company performance varies among economic sectors, countries and regions. It is influenced by a very large number of factors. This study aims at identifying and analyzing the determinants that must be considered by company's management presently in order to face competition and achieve superior financial performance. The research methodology used is specific for the theoretic nature of the article and includes literature review, comparative analysis and synthesis. Results validate and argue as relevant modern factors that influence the performance of contemporary companies: organizational culture, corporate social responsibility, innovation, knowledge spillovers. Study limits refer to the fact that these four factors are not entirely responsible for modern business performance and future research should be done to develop an integrative point of view on overall performance determinants.

This paper is a dissemination of the results obtained by the author in the doctoral program "The financial performance of EU member states' companies", coordinator: Professor Carmen Corduneanu, PhD, carried out within West University of Timișoara, Romania, in the period October 2010- July 2012.

Keywords: financial performance, organizational culture, innovation, corporate social responsibility, knowledge spillovers

JEL code: D20, D23, L20, L25

1. Introduction

The financial performance of companies changes over time. Profits are different from one year to another and from one company to another. Some companies obtain increases in profit; others record decreases and some even losses. What are the reasons of these changes and what are the determinants of financial performance that influence it to be different in time and space? This article will try to answer these questions.

Company's financial performance is a fact. Analyzing and improving it is not just about indicators calculated based on annual financial statements, market data or by other means. This is the result of company's overall activity and it is influenced by many factors. Generally speaking, performance factors can be structured in: (1) factors of efficiency, that refer to economic, social and organizational efficiency, (2) internal environmental factors that refer to ownership, management, company size, complexity, technical endowment, location, human potential, informational and intellectual capital, financial position, organizational culture, etc. and (3) external environmental factors: economical, technological, political, demographical, cultural, scientific, organizational, legal, social, educational, environmental and others (Sima 2009). Among the many factors that can be analyzed, this research will focus on the modern ones, which have been conceptualized in the relatively recent period. These factors are: organizational culture, corporate social responsibility, innovation, knowledge spillovers and other advantages offered by business clusters.

2. Literature review

The studies that emphasize on the determinants of company financial performance include two dimensions: theoretical and practical. Theoretically speaking the factors influencing business performance are extremely numerous, but only a select few, considered more important, are empirically verified. In choosing a factor, besides the relevance criterion, the quantitative or qualitative nature is also decisive. Qualitative factors like organization culture are difficult to measure. Research will continue with a comparative study on theoretical and empirical evidence found in literature regarding the four modern performance factors stated above.

2.1. Organizational culture

Organizational culture is a performance determinant that has been intensely studied in the recent period. Although it existed in a certain form along with the establishment of first companies, it acquired more importance, only in the relatively recent period, amid ever rising market competition, the development of economic research and the growing importance of human resources in the new knowledge economy.

Organizational culture is an intangible factor of social and psychological nature, which leads employees to behave and act in a certain way. It arises along with the growth of company personnel because of each employee's personality and if not controlled can have a negative influence on performance. The technical side of organizational culture consists of a set of rules, procedures, decisions and recommendations. Through these techniques, company's management attempts to induce a positive attitude and behavior for company employees. Once a certain culture is implemented among personnel, it has a strong effect on new employees. It is therefore very important for it to be a positive and constructive one.

The components of organizational culture are very difficult to quantify. Denison and Mishra (1995), in their study, identified four dimensions of organizational culture: employee involvement, consistency, adaptability and mission, measures that, according to the results of their study, are positively correlated with various indicators of company performance. Another author (Sorensen 2001) reveals that a strong positive organizational culture increases company performance only in periods of economic stability and its influence is negligible during high volatility periods. Baer and Fres (2003), after developing several empirical studies, have found that a constructive organizational climate that positively affects performance should also encourage initiatives and sustain innovative employees by adopting and implementing their innovations. A company should also provide a psychological safety to employees in the sense that they should not suffer negative consequences if their innovations don't have the desired effect. A recent article (Skerlavaj et al. 2007) shows the positive influence of another element of organizational culture: employee attitude towards learning and training programs. Quoted researchers argue that this has a direct effect on company's non-financial performance and an indirect effect on financial performance.

2.2. Corporate social and environmental responsibility

Corporate social responsibility (CSR) refers to the fact that presently companies must contribute to the development of modern society. This concept is relatively recent, especially for our country. The main supporters of this practice are international institutions such as the United Nations, European Union, Organization for Economic Cooperation and Development, World Bank, the central government and local authorities. To encourage such practices some of the mentioned institutions have developed a set of principles and recommendations. Thus, companies wishing to be socially responsible must know and integrate these practices with their activities.

CSR practices are varied. However, what they have in common is their voluntary nature. Therefore an initiative may be considered as belonging to CSR if it is not taken in accordance with certain regulations or as a result of complaints or pressure from nongovernmental

organizations or consumers. Socially responsible practices concern the general welfare of the community and environment protection. Some examples of such practices are: reduced energy consumption and the use of renewable materials, improved production processes with few waste and chemical substance usage, removal of harmful products even if they are not illegal, the choice of ecologic materials, providing detailed information about products, implementation of social protection programs for employees (medical, psychological, recreational facilities), for people with disabilities, and others.

Responsible activities bring benefits for both community and company. Benefits are more noticeable, direct and immediate for the community, and harder to assess at company level. However theorists explain a series of advantages obtained by companies that invest in social activities. Such programs generate several benefits at company level, such as: (1) differentiation from competitors and high customer loyalty to the brand, (2) improved reputation, (3) increased sales and market share, (4) increased employee loyalty, (5) investments from individual and institutional investors concerned about sustainable development, and others. According to theory all these positive consequences of CSR practices have a positive effect on company performance. Empirical studies that explored the correlation between corporate social responsibility and financial performance had varied results. In a recent study (Garcia-Castro, Arino and Canela 2010) the authors conducted a critical review of the literature that empirically examines the correlation between the social and financial performance of the company. They argue that, despite the numerous studies (over 100) made in the last three decades, there is insufficient evidence to support this correlation because the obtained results are not similar. Thus several researchers have identified a positive correlation between the two characteristics and some obtained ambiguous results. A few studies have even found a negative correlation.

In another study (Margolis and Walsh 2003) the authors argue that out of the 127 empirical studies examined, 109 had social performance as an independent variable, and financial performance as dependent variable. Of these, most (54) validate the correlation between the two variables, 28 have identified an insignificant link, and 20 had conflicting results. Of the 22 studies that considered social performance as a dependent variable, most (16) confirmed the correlation between the two characteristics. Although the results are varied, there are few studies in which CSR practices adversely affect performance; therefore profits obtained after making socially responsible investments mostly cover their expenses.

2.3. Innovation

In a concise interpretation, innovation activities refer to the creation, adaptation and adoption of new products, services, processes, and their improvement (Iancu 2006: 12). Innovation is one of the key factors influencing the performance of modern companies, intensively studied and promoted presently, in the context of the fierce competition at microeconomic level, but it is also a priority direction for development at macroeconomic level, national and international. For example the well-known Lisbon Agenda, recently extended until 2020 but with broadly the same objectives, sustains innovation and has as main objective economic competitiveness growth.

Innovation is usually a distinct activity within a company. But there are companies that do not have such compartments in their organizational structure. An innovation decision is first necessary to initiate this kind of activity. For example smaller companies can not afford to invest in innovation due to the high cost of this activity compared to the funds they have at their disposal. The size of investment in innovation, in absolute amount, is usually proportional to the size of the company and inversely proportional to its sales if we consider the relative weight in turnover of R & D expenditure.

According to Kemp et al. (2003: 11) three elements of innovation can be identified: (1) innovation decision, (2) the intensity of innovation (how much to invest in innovation) and (3) the inputs of the innovation process, production process itself and the output which is actually the

outcome of the entire innovative process. Another description of innovation shows the following components: (1) product innovation, (2) process innovation, (3) marketing innovation and (4) organizational innovation (Gunday et al. 2008: 5).

The main indicators for assessing innovation correspond to its components: the existence of this activity in the company, the size of innovation expenditure, number of domestic projects, foreign or jointly developed and implemented projects, the number of new products introduced, the number of patents and others.

Empirical studies that verify the influence of innovation on performance at the microeconomic level generally have similar results, confirming the positive effect of research. McAdam and Keogh (2004) show that innovation is very important for company long - term economic development. It is a factor that explains differences in competitiveness between companies, regions and countries. Other authors (Gunday et al. 2008) measured the influence of innovation on three categories of performance: innovational, operational and market. They found that a correlation exists between innovation and operational performance, but have not identified a significant link between innovation and market performance.

The authors of a larger study (Kemp et al. 2003: 52) identified a positive impact of innovation on certain measures of performance of small and medium-sized companies. The study found that innovation leads to increased turnover, particularly for small business and increased employment, especially in medium-sized companies. A correlation between innovation and profitability hasn't been found.

2.4. Knowledge spillovers

Another factor affecting the performance of companies, particularly in industry, is geographical location. Although apparently it can be presented as an external environmental factor, the choice of company site is at the discretion of owners and directors (within the financial possibilities), being a company-specific factor in this regard. Presently, given the specifics of production activities, especially the advanced level of specialization, a large part of market goods, especially durables are manufactured by a group of interconnected companies. For example, automotive companies buy various parts, assemblies, tires, seats and other components from other more specialized companies and assemble them together with other components manufactured in own factories and sell cars under their brand name. Among these companies that are both producers and suppliers in the same time, certain cooperation relations and being established. Because of these ties they ameliorate their performance by improving delivery, product characteristics, working together even for innovations and changes that each brings to the product. All these advantages can easily materialize if the companies are located in the same region, city or industrial zone. As a result of these considerations industrial and commercial zones have been formed over time under the generic name of industrial or commercial clusters in which companies from similar sectors have developed. Good examples of such areas can be identified in the automotive, forestry and energy industries.

Although infrastructure has seen a continuous development in the recent decades the geographical distance between suppliers and producers is a disadvantage compared to competitors with better positioning. The main drawbacks are the additional costs of transportation, insurance, additional time required, customs charges and others.

Other advantages of interconnected companies' agglomeration are knowledge spillovers. These occur when a company obtains knowledge from another company, university or government agency, without paying for this benefit in a transaction brokered by the market (Maftai 2010: 1). Thus different product and process innovations of suppliers or competing companies helped make innovations and improvements within the company. The existence of clusters also favors the development of joint research and rapid correction of defective products that may occur.

With the emergence and spread of theories arguing the positive influence of business clusters on company's performance numerous empirical studies verified this correlation. In a recent study (Folta, Cooper and Baik 2006) the authors found evidence to support these theories. They found that companies located in industrial areas are performing better than companies outside clusters. Corporate performance increases with the development and expansion of their business cluster, but at a certain point, crowding a large number of companies with similar activities generates increased competition that makes the survival of all companies difficult. Molina-Morales (2001: 290) revealed a higher performance for companies located in industrial clusters, also identifying a greater capacity to absorb knowledge externalities in the case of companies with greater seniority. Another study found a positive influence of factors specific to business clusters (economies of scale, urbanization and the formation of company groups) on performance (Malmberg, Malmberg and Lundquist 2000). A more recent study (Gilbert, McDougall and Audretsch 2008: 414) shows that industrial agglomeration has a positive effect on the company's innovative edge and sales.

3. Discussion

Organizational culture is a strong factor that influences company performance. Its importance has intensified ever more in the context of the current competition between companies and the enhancing of human resources importance. It is relevant to note that the formation of an organizational culture is inevitable because this is often influenced by the personality of employees. Or, to remove the risk of string of unproductive attitudes and behaviors, management involvement is imperatively necessary. This can be done by implementing behavioral regulations, fair and proper procedures regarding discipline and various social activities for employees.

Social responsibility primarily involves additional costs for the company, consisting of both material costs and expenses for designing and implementing specific social activities. These, in a first phase, adversely affect company's financial performance as well as all other expenses. However, they sensitize consumers, making them feel obliged to support responsible companies, as long as their products have the same quality and price with those of competitors. The effects are generally positive; the growth in revenue generated by responsible activities is superior or at least equal to the expenses incurred. In addition, social responsibility on a long term helps keeping a positive perception about the company among consumers.

Innovation is crucial for the long term success of any company, regardless the size. However, most small companies can not afford to invest in innovation. Presently, given the literal explosion of knowledge and the existence of numerous research projects funded by various organizations or government, companies can be informed without costs about news and innovations in the their field of activity. Thus they can implement certain elements of novelty without having to finance research projects from their own funds.

Business clusters have advantages and disadvantages. Thus for a company that aims to increase its competitiveness and penetrate international markets, collaboration and knowledge spillovers in industrial agglomerations are very helpful. But for companies that aim to preserve a share of the local market and are satisfied with a certain level of results a relocation within business clusters is not recommended. This depends mostly on company's profile and objectives.

4. Conclusions

Presently, in the context of the fierce market competition, managers have to consider new factors that can enhance company performance. Besides the classic means meant to increase productivity, like investment in physical capital and other investments that help cost reduction, modern companies must invest in other key factors that affect company results.

These new factors, that have a positive impact on company's financial performance, are organizational culture, corporate social responsibility, innovation, knowledge spillovers and other

characteristics that are specific to business clusters. The first, third and fourth factors have a very strong human and managerial determination. They mainly include investments in human resources and are meant to increase process and product quality. This has a positive effect on competitiveness even if company products are more expensive than those of competitors. Innovative and high quality products also generate a large amount of value added and enhance company's financial performance.

Although theories about the benefits brought by the mentioned factors are not very recent, they are considered new in the present article because a relatively small number of Romanian companies take them into consideration in the management process. Among these companies the majority are subsidiaries of multinationals that apply the same strategies as mother companies and other economic entities owned by foreign investors.

Companies that aim long-term competitiveness and financial performance must include in their strategies measures concerning the development of human resources and insure a constructive organizational culture, a supportive environment and encourage innovation and knowledge exchange between employees and between the company and collaborators. All these internal efficiency measures can be doubled by socially responsible practices to insure the basis of a good perception among consumers and a long presence on the market.

This paper is a dissemination of the results obtained by the author in the doctoral program "The financial performance of EU member states' companies", coordinator: Professor Carmen Corduneanu, PhD, carried out within West University of Timișoara, Romania, in the period October 2010- July 2012.

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THE FINANCIAL PERFORMANCE OF EUROPEAN COMPANIES: A COMPARATIVE APPROACH

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The present study empirically examines the financial performance of European companies and tries to identify the profitability differences that exist between: enterprises with same profile, economic sectors and between several countries from the European Union. Based on data of the year 2009, the newest available on the BACH-ESD database, three financial performance main indicators are being calculated, namely: Return on Assets, Return on Equity and Net Margin. Results are discussed and compared with the ones obtained in former similar studies and some conclusions are drawn. The most performing sectors are found to be mining, quarrying, professional, scientific and technical activities, utilities and IT&C. The sectors that perform the worst are transport and storage, agriculture, accommodation and food service. As shown in other studies the most profitable and competitive companies in the sample belong to the Nederland, Belgium and Austria and the least profitable ones are situated in Italy and Portugal. As a complementary useful result of the study, the average values obtained for the three variables, in the various sectors considered, can be utilized for future comparisons, for assessing the financial performance of companies that belong to same sectors as those surveyed.

This paper is a dissemination of the results obtained by the author in the doctoral program “The financial performance of EU member states’ companies”, coordinator: Professor Carmen Corduneanu, PhD, carried out within West University of Timișoara, Romania, in the period October 2010- July 2012.

Keywords: financial performance, return on assets, return on equity, net margin, BACH-ESD database

JEL code: L20, L25

1. Introduction

From the perspective of companies and their owners, obtaining profit is the ultimate objective and the main driver of company activity. Profit can be considered the result of all efforts made and the incentive necessary for sustaining further activity. Financial performance highlights the efficiency with which firms transform their revenue into income that can be afterwards distributed to shareholders. This mostly makes the difference between companies that are winners and those who are defeated in market competition. Companies that are not profitable usually end up being taken over by other more profitable ones or go bankrupt. However in terms of society as a whole, a very high profitability can signal a lack of competition in the market. Thus, if the profits outweigh by far the efforts made, the risks assumed and the value of introduced innovations, they might be the result of a lack of competition in the market, situation that adversely affects consumers and the general welfare of society.

The positive effects of financial performance are very numerous. Besides generously rewarding shareholders, profitable companies attract investments, from both foreign and domestic investors, and enhance the development of the sector in which they activate and of the economy as a whole. Profitability encourages companies to employ people, pay salaries and product goods and services. Profitable companies are those who pay high taxes and transfer a share of their profits to governments and allow means of living for country population. Financial performance is, in the

same time the result of a large variety of factors (Gruian, 2010) including: company productivity, efficiency, effectiveness, performing management, proper corporate governance, innovation and other external factors like: macroeconomic, monetary, fiscal and sectoral conditions. The present study tries to explore in terms of financial performance the differences between European sectors and countries. It will also identify the most profitable and unprofitable industries and analyze if there are common under-performing or over-performing sectors, or sectoral performances of different countries are complementary and one country excels where another fails to succeed. The research will start with a literature review; which will present results of similar studies and mostly utilized measures of financial performance. It will continue with the empirical assessment of variables. The obtained results will be discussed and some conclusions will be drawn.

2. Literature review

The competitiveness and financial performance of European companies are the subjects of numerous studies. Most of them are financed by the European Commission through its Enterprise and Industry Directorate General. Studies are meant to highlight the past and present situation of microeconomic performance in the EU and identify the factors that influenced the way competitiveness and profitability evolved in the past period.

A recent study (European Commission, 2009) analyses the competitiveness and profitability of EU companies considering a sectoral approach. It also identifies the main sectoral drivers of performance. The period considered is 1995-2005 and the data used in the profitability analysis is from Bank for the Accounts of Companies Harmonized (BACH) and from the US Department of Commerce, Bureau of Economic Analysis. The study also verifies the similarities and differences between the US and the EU companies. A slight difference between UE and US profitability, measured by Return on Assets and Net Margin can be observed in the considered period. The EU recorded a higher profitability growth due to the dramatic lowering of corporate tax rates across the region, whereas the US saw no significant reduction in its corporate tax rate (European Commission, 2009: 18).

Authors of the same study consider that among the EU countries there is a wide disparity between the most profitable sectors and the least profitable ones. The best performing sectors are business services, utilities, mining and quarrying and other commodity based sectors and some manufacturing industries, especially the manufacture of coke, refined petroleum and nuclear fuel and the manufacture of pulp, paper and paper products which add value to the commodity producing industries of mining and forestry. At the other end of the hierarchy we can find land and air transportation, activities that had a negative average of net margin in the considered period. Other low performing industries are several manufacturing sectors, wholesale and retail trade, constructions, etc.

The most widely used indicators of financial performance are Return on Assets, Return on Equity, and Net Margin. Return on assets (ROA) is one of the most utilized financial ratios. It evaluates the efficiency with which the assets are utilized. ROA is calculated as the ratio between net profit and company's assets, on the basis of Balance sheet information (Achim, 2010: 353).

Return on Equity (ROE) shows the efficiency with which the capital brought by investors is utilized for obtaining profit. This is also an often utilized profitability indicator utilized especially by shareholders and also named financial profitability (Colasse, 2009: 72). It is calculated by dividing the net result of the activity to company's equity. This indicator is important especially for investors, because it helps them compare company's results with those of competitors.

Net Margin (NM) or profit margin is a profitability measure that shows company's ability to transform revenue into profit and control production costs. It assesses the effectiveness with which profit is generated from the revenue through the value add management process (Bull, 2008: 24). NM is a very good indicator for comparing companies in the same industry and is

sometimes used to compare business sectors to observe the differences of profitability. Yet the value of the NM can differ very much depending on company's profile. Thus companies that belong to the wholesale industry can have net margins under 5% and be very profitable because of their turnover. On the other hand companies that belong to services, information technology or other highly innovative sectors, can have a net margin of over 25-30%.

3. Research methodology

3.1. Sample and data selection

For the comparative study we will use data from BACH-ESD, the European database of aggregate information on non-financial corporations. Data is provided by the Central Balance-Sheet Data Offices from eight countries of the European Union (EU): Austria (AT), Belgium (BE), France (FR), Germany (DE), Italy (IT), Nederland, (NL), Portugal (PT) and Spain (ES).

The sample provided by the BACH-ESD database contains a relatively large number of companies from each of the participating countries, thus the data provided has a high level of confidence and quality. The database has been used recently by many other authors (e.g. European Commission, 2009: 134; Busuioc, 2009 and others). The data is also rigorously organized and can be broken into categories including 13 private economic sectors according to the NACE rev. 2 statistical classification (classes A-N), excluding the financial intermediation class (K). The database also provides a number of 28 rates from companies' annual accounts that refer to financial structure, cash-flow and profitability. For the present financial performance comparative study we considered data from the year 2009, the newest available in the database. We compare all eight countries and all 13 business sectors. We also consider all the companies regardless of size.

3.2. Variable definition

The variables analyzed in the present comparative study are: Return on Assets (ROA), Return on Equity (ROE) and Net Margin (NM).

1. $ROE = \text{Profit or loss of the year} / \text{Capital and reserves}$

The ROE indicator corresponds to Rate no. 12, found in the Operating costs, earning and profitability rates section of the BACH-ESD and does not require additional calculations.

2. $ROA = \text{Profit or loss of the year} / \text{Total Assets}$

The ROA rate is calculated in the present study by multiplying Rate no. 12 (ROE) by Rate no. 22 of the BACH-ESD database, which is the rate between Capital & reserves and Total Assets.

3. $NM = \text{Profit or loss of the year} / \text{Net turnover}$

NM is obtained by dividing the ROA indicator, calculated above to Rate no. 16 in the Operating costs, earning and profitability rates section of the database (Net turnover / Total Assets).

4. Variable calculation and comparative analysis

The calculated variables are presented in Table 1 (ROA), Table 2 (ROE) and Table 3 (NM). Average values presented on the table margins are obtained as a weighted average (W.A.) of the three indicators presented for countries and sectors, considering the size of the Value Added (VA) in each country and sector. Thus the profitability of larger sector has a more important impact on countries' economy average profitability than the impact of a smaller one. The same rule stands for the average profitability of business sectors.

4.1. Return on assets

Table 1: Return on Assets, year 2009

NACE CODE	NAME OF NACE SECTION	COUNTRY								
		AT	BE	DE	ES	FR	IT	NL	PT	W.A.
A	Agriculture, forestry and fishing	1,36%	1,07%	n.a.	0,12%	1,19%	0,71%	2,11%	-0,56%	1,07%
B	Mining and quarrying	6,30%	10,22%	0,45%	4,22%	10,69%	5,03%	26,89%	3,08%	15,32%
C	Manufacturing	6,22%	5,47%	1,24%	0,31%	1,68%	0,28%	3,92%	0,83%	1,74%
D	Electricity, gas, steam and air conditioning supply	4,13%	2,81%	6,37%	4,94%	2,58%	4,43%	2,58%	3,37%	4,38%
E	Water supply; sewerage, waste management & remediation act.	1,72%	0,81%	3,13%	3,17%	2,66%	1,18%	0,27%	1,25%	2,23%
F	Construction	4,75%	2,94%	3,31%	-0,23%	4,28%	0,98%	4,23%	0,19%	3,04%
G	Wholesale & Retail trade; repair of motor vehic. & motorcyc.	4,05%	3,48%	4,99%	3,64%	3,67%	0,75%	4,69%	2,17%	3,48%
H	Transportation and storage	-1,92%	1,08%	0,99%	0,35%	0,70%	0,90%	1,12%	-0,71%	0,63%
I	Accommodation and food service activities	2,08%	1,19%	-1,04%	-0,73%	2,71%	-0,90%	3,72%	-1,65%	1,18%
J	Information and communication	5,06%	4,09%	2,25%	9,10%	5,50%	1,33%	4,18%	4,43%	4,13%
L	Real estate activities	0,47%	1,42%	1,45%	-0,24%	2,18%	0,81%	n.a.	0,35%	1,61%
M	Professional, scientific and technical activities	7,72%	2,68%	4,11%	6,39%	3,93%	1,33%	9,10%	3,20%	4,47%
N	Administrative and support service activities	2,13%	1,31%	3,55%	1,88%	1,65%	0,51%	2,07%	1,95%	1,66%
	W.A.	3,87%	3,45%	2,37%	2,83%	2,80%	0,91%	5,34%	1,41%	2,68%

Source: BACH-ESD database, authors' calculations

We analyze the ROA indicator first because it is the most appropriate for financial performance measurement. Unlike ROE, ROA considers all capital invested in the business, regardless its provenience. In the present case the value of ROA indicator varies from a minimum of -1.92% in the transportation and storage sector of the Austrian economy to a maximum of 26.89% in the mining and quarrying sector of the Dutch economy. Its values vary across countries and industries. The best values for ROA belongs mostly to the mining and quarrying sector, which had the best financial performance in the context of the economic and financial crisis that generated a strong growth of the raw metals demand and price. Thus The Nederland and other European countries like Belgium, Austria and Italy achieved a very high performance in the mining sector during the year 2009 due to these international conjunctures.

The second best performing sector was the one including professional, scientific and technical activities, which had an average ROA of 4.47% on overall. Best performing companies of this sector belong to The Nederland, Austria (which performed best in this sector) and Spain. Other sectors of the European with good results are utilities, information, communications and commerce. Average value of ROA for the companies included in the sample is 2.68%. This is a relatively low figure but it is acceptable considering the effects of the economic and financial crisis. We can also note that some business sectors were more affected by the crisis than others. The ones that had the lowest profitability are transportation and storage, agriculture, hotels and restaurants, real estate and even manufacturing. If we consider the overall performance of countries we can see that the most competitive ones managed to maintain the highest profitability levels. These countries are The Nederland, Austria and Belgium. Other countries with a lower level of competitiveness suffered dramatically low levels of financial performance (e.g. Italy and Portugal).

4.2. Return on Equity

Table 2: Return on Equity, year 2009

NACE CODE	NAME OF NACE SECTION	COUNTRY								
		AT	BE	DE	ES	FR	IT	NL	PT	W.A.
A	Agriculture, forestry and fishing	3,20%	3,52%	n.a.	0,25%	1,74%	2,02%	6,36%	-1,71%	2,47%
B	Mining and quarrying	25,25%	17,06%	2,26%	14,15%	17,98%	12,40%	171,61%	8,01%	79,01%
C	Manufacturing	17,25%	11,18%	4,18%	0,82%	4,75%	0,80%	6,68%	2,37%	4,53%
D	Electricity, gas, steam and air conditioning supply	10,09%	7,17%	21,38%	11,79%	8,57%	11,09%	7,29%	11,27%	12,94%
E	Water supply; sewerage, waste management & remediation act.	6,47%	2,10%	9,18%	9,06%	9,76%	3,97%	0,99%	6,26%	7,23%
F	Construction	21,71%	5,63%	20,77%	-1,16%	17,71%	4,09%	13,38%	0,93%	12,19%
G	Wholesale & Retail trade; repair of motor vehic. & motorcyc.	13,29%	8,64%	16,10%	9,71%	11,09%	2,88%	11,85%	6,92%	10,28%
H	Transportation and storage	-6,19%	2,81%	3,52%	0,74%	2,67%	2,84%	2,37%	-5,67%	1,86%
I	Accommodation and food service activities	11,86%	3,23%	-3,43%	-1,89%	8,32%	-2,60%	9,30%	-5,75%	3,59%
J	Information and communication	13,15%	10,54%	4,82%	29,57%	15,79%	4,67%	17,93%	12,43%	12,82%
L	Real estate activities	1,21%	3,65%	4,59%	-0,52%	6,25%	1,88%	n.a.	1,35%	4,73%
M	Professional, scientific and technical activities	21,95%	3,95%	13,79%	14,18%	8,54%	5,56%	17,97%	4,99%	9,94%
N	Administrative and support service activities	6,64%	3,60%	16,25%	6,74%	5,76%	2,00%	6,14%	8,62%	5,87%
	Weighted average	11,79%	7,63%	8,01%	8,28%	8,46%	2,85%	19,17%	3,90%	8,32%

Source: BACH-ESD database, authors' calculations

The second indicator considered for the assessment of financial performance is Return on Equity. Even if we present it to be the second indicator of profitability, it is of most importance to shareholders because they are interested in how well company management has used their funds to make profit, and not directly interested of how efficiently managers used the borrowed capital. Values obtained for the ROE deepen the differences between the companies included in the sample. From a sectoral point of view the mining and quarrying industry leads by far with a huge profitability average of almost 80%. This is strongly influenced by the favorable international conjuncture of the mining industry and the high competitiveness of the Dutch mining sector. We do not exclude the fact that these results can be influenced by the variable sample of companies provided by the BACH-ESD database. Yet all European companies in the mining sector obtained very good results in terms of profitability, with the exception of Germany.

Consequent with the ROA results European companies had good financial results in terms of ROE in the utilities sector, information and communications and recorded low performances in transport and storage, agriculture and hotels and restaurants. A notable difference is observed in the construction sector, where the equity invested by shareholders represents a relatively low proportion in the total investment. This transforms the 3.04% economic profitability in a higher financial profitability of 12.19% for investors that activated in this sector.

Considering the overall countries' financial performance measured by ROE The Nederland and Austria are still the first two countries. At the other end Italy and Portugal are the worst performers with a ROE rate well below the 8.32% average.

4.3. Net margin

Table 3: Net Margin, year 2009

NACE CODE	NAME OF NACE SECTION	COUNTRY								
		AT	BE	DE	ES	FR	IT	NL	PT	W.A.
A	Agriculture, forestry and fishing	2,02%	1,11%	n.a.	0,18%	2,76%	0,99%	2,90%	-1,58%	1,82%
B	Mining and quarrying	3,91%	70,84%	1,12%	50,58%	16,31%	9,48%	13,44%	6,33%	12,33%
C	Manufacturing	4,99%	8,42%	1,14%	0,38%	1,35%	0,30%	8,98%	0,98%	2,11%
D	Electricity, gas, steam and air conditioning supply	4,43%	5,89%	4,46%	14,07%	8,35%	5,57%	5,15%	14,35%	7,32%
E	Water supply; sewerage, waste management & remediation act.	2,88%	3,25%	8,08%	10,42%	4,51%	2,61%	0,68%	5,54%	5,53%
F	Construction	3,39%	4,97%	2,91%	-0,54%	3,85%	1,43%	3,24%	0,43%	2,84%
G	Wholesale & Retail trade; repair of motor vehic. & motorcyc.	2,09%	2,07%	1,48%	2,36%	1,57%	0,46%	3,66%	1,67%	1,77%
H	Transportation and storage	-2,18%	1,81%	1,10%	1,41%	1,14%	3,13%	2,34%	-2,22%	1,42%
I	Accommodation and food service activities	2,95%	2,60%	-0,49%	-1,83%	2,31%	-1,55%	5,12%	-3,47%	0,95%
J	Information and communication	4,36%	8,13%	5,46%	12,98%	6,67%	2,86%	9,00%	7,19%	6,80%
L	Real estate activities	4,00%	19,67%	8,89%	-2,17%	15,09%	1,86%	n.a.	3,18%	11,55%
M	Professional, scientific and technical activities	6,60%	37,63%	3,37%	136,44%	18,74%	1,30%	12,48%	16,09%	16,47%
N	Administrative and support service activities	1,66%	2,24%	2,98%	2,13%	1,57%	0,59%	2,14%	2,56%	1,75%
	Weighted average	3,09%	7,80%	2,35%	4,37%	4,14%	1,45%	6,44%	2,91%	3,79%

Source: BACH-ESD database, author's calculations

In terms of Net Margin the hierarchy of countries and sectors changes slightly. The sector that brings the highest profits compared to its turnover is the one that refers to professional, scientific and technical activities. Although profits in this sector represent a smaller proportion of companies' assets and equity, they represent a higher proportion of turnover. Thus if the turnover would be higher, this sector would have the biggest potential. The mining and quarrying sector also has a high profit margin, but this is still a modest figure compared to the very high performances in terms of ROA and ROE. This proved that the high performances of this sector were strongly based on the high turnover achieved. High performances can also be encountered in the real estate activities, another service sector that produces higher profits compared to turnover. Other performing industries are utilities, information and communications. Poorest results were obtained in the hotels and restaurants services sector, transportation, wholesale, retail trade and even manufacturing, sectors mostly influenced by the economic and financial crisis. If we consider the countries included in the sample, the best results in terms of NM were obtained by Belgium, followed closely by The Nederland. Poorest performing countries, consequent with previous results obtained in this study, are Italy and Portugal.

For a better understanding of study results we will also present them as diagrams (Figures 1, 2).

Figure 1: The financial performance of European sectors

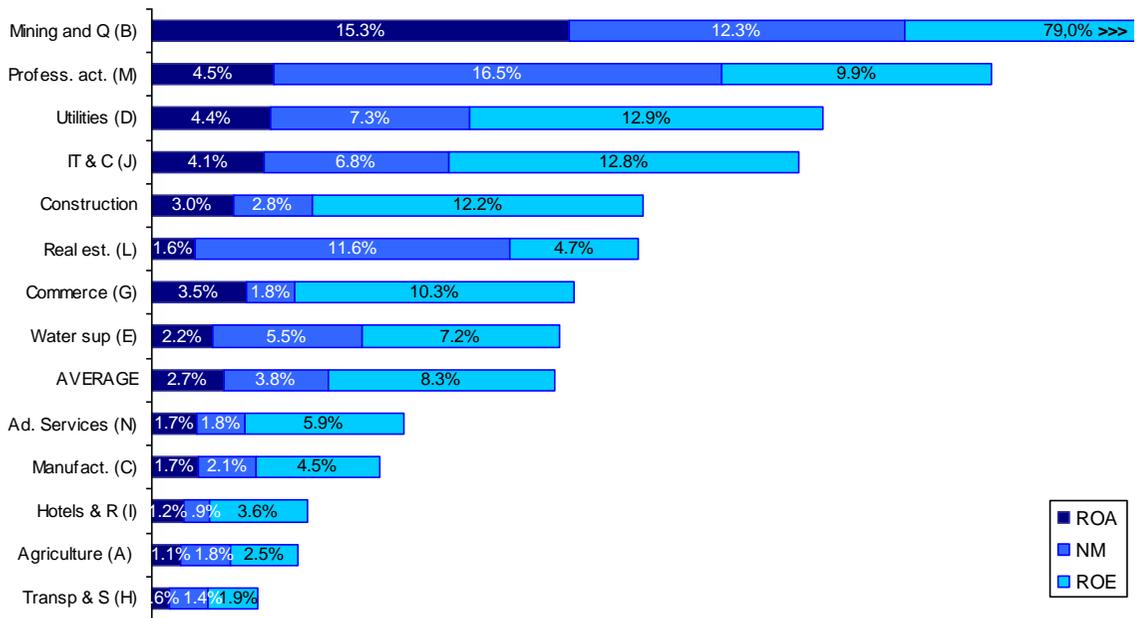
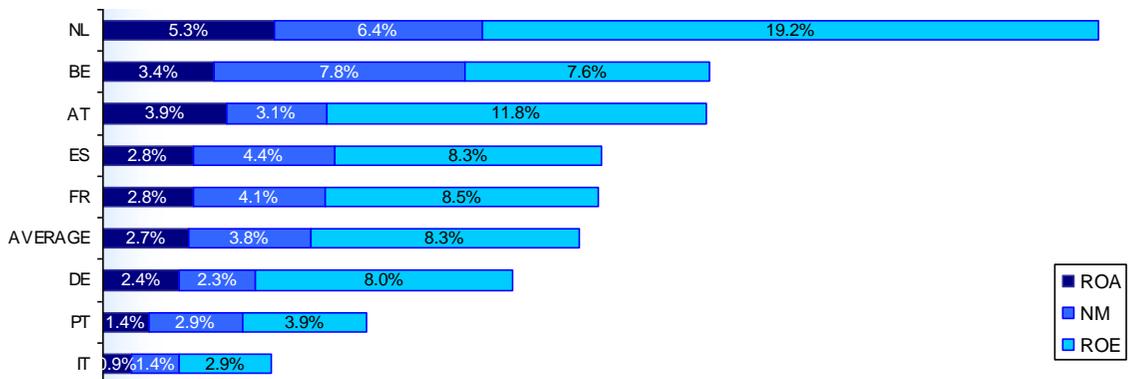


Figure 2: The financial performance of European countries



5. Conclusions, limitations and future research

Financial performance can be measured in various ways. In the present study we assessed it at a mezzo and macroeconomic level based on data from microeconomic level, more precisely, from the harmonized annual financial statements of a sample of European companies.

Several important differences have been identified between the thirteen non-financial economic sectors and between the eight developed countries considered. This article shows the strengths and weaknesses of the European economy. Thus as we can clearly see from the graphs above, the most performing sectors are mining and quarrying; professional, scientific and technical activities, utilities and IT&C. The sectors that perform the worst are transport and storage, agriculture, accommodation and food service activities. As shown in other studies the most profitable and competitive companies in the sample belong to the Nederland, Belgium and Austria and the least profitable ones are situated in Italy and Portugal. Yet the results refer to the average values recorded by countries' companies. One should consider that there are performing and underperforming companies in every country but averages values for the considered samples are the ones presented above.

Results can also be interpreted in the sense that some industries are more vulnerable in times of economic and financial crisis (transport and storage, agriculture, accommodation and food services, manufacturing). Moreover countries that are less competitive suffer stronger overall decreases in economy due to economic crises. These conclusions are also in line with other research on the same topic.

Present study also offers average national and sectoral rates for profitability measurement and comparison in the year 2009. These values can be used as reference points for other studies that have the similar topics.

This study also has some limitations. The accuracy and relevance of the results are limited to the quality and exhaustiveness of the data provided by the BACH-ESD database. More details about this database can be obtained from the internet link in the bibliography. Other limitations refer to the short period considered, of only one year and the influence of economic and financial conditions in the year considered. Future studies could consider a larger number of countries, a longer period of time and a more detailed classification of the economic activities. They could also try to examine in depth the factors that caused the performance differences.

This paper is a dissemination of the results obtained by the author in the doctoral program “The financial performance of EU member states’ companies”, coordinator: Professor Carmen Corduneanu, PhD, carried out within West University of Timișoara, Romania, in the period October 2010- July 2012.

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A POSSIBLE MODEL FOR ANALYSING THE PRACTICAL NEEDS OF STUDENTS IN ECONOMICS-PRACTEAM MODEL

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Data presented in this paper are part of the activities of the PRACTeam project "Practice of students in economics. Inter-regional partnership between universities and the labor market" project co-financed by European Social Fund Operational Programme Human Resources Development 2007-2013 - "Invest in people! "Contract no. POSDRU/90/2.1/S/64150. Identifying the needs of practice activity had as research tools to focus group and questionnaires. Research subjects were third-year students who have completed the practical work of the three partner sites: Oradea, Timisoara and Suceava. The results obtained in this research were the basis for discussions during the workshop PRACTeam between student representatives, tutors and practice coordinators. Based on the central elements and highlighted problems were developed materials for both tutors and students.

The specific objectives of identifying needs for practical training were: to determine administrative and organizational elements deemed most appropriate for students in terms of practical training, identifying methods of communication between all stakeholders (students, coordinators and tutors of practice) the most suitable in terms of training students, identifying the strengths and weaknesses in relation to the conduct of practical training

Presentation integrates the results with emphasis on elements that can be improved, structured around the following areas: evaluation of the internship, access into the practice, conduct practical work (satisfaction with the relationship with the tutor, satisfaction with relationship with Coordinator of practice, student satisfaction with the activity, satisfaction with knowledge, skills acquired in satisfaction with the practice, satisfaction with communication with colleagues) positive, negative aspects, students' views on improving business practice.

Keywords: needs analyses, students, practice activity.

JEL:M53, M54

Introduction

According to the law "practice is the work of students, in accordance with the curriculum, which aims to verify the applicability of their theoretical knowledge learned in the training program."

Increase skill practice and increase the students' work skills leading to better employability of the labor market, with positive effects on employment, labor productivity and wage levels. This is possible by adapting to the needs of students as both supply and labor market needs.

Practical project's overall objective: "the students' work skills development economists during the practical training and internship, conducted in partnership inter-regional labor market between universities and business to improve integration in the labor market economists.

According to sociological theories, identifying needs involves collecting data on those in need, their environment, the problems faced and solutions to these problems. Needs analysis is part of needs with the needs assessment that involves synthesizing information obtained in the stage of identifying needs, setting priorities for the decider.

The data of this study were obtained by questionnaires and focus group and are the result of identifying the needs of students who have completed the practical training.

The results from this needs assessment were the basis for discussions during the Workshop PRACTeam presented student representatives, tutors and practice coordinators. Based on the central problems and issues that emerged were developed practice materials for both tutors and students.

Objectives

The specific objectives of identifying business needs for practical training were:

- Determination of the administrative and organization considered most appropriate for students in practical training,
- Identify methods of communication between all stakeholders (students, coordinators and tutors to practice) the most appropriate in terms of students in terms of practical training,
- Identify strengths and weaknesses regarding the conduct of practical training

Identify needs of students on practical training was conducted by:

Apply a third-year student questionnaire that followed the practice at each partner

3 focus groups with students in third year of study, one from each partner.

The 627 questionnaires were applied and interpreted as follows: 194 in Oradea, Suceava and 212 to 221 in Timisoara.

3 focus groups were organized as follows: 9 students in Oradea, Suceava 14 students and 12 students in Timisoara.

Although data analysis and processing of focus groups revealed that positive elements to exceed the negative ones in terms of practical assessment activities from students, to integrate the presentation of results with emphasis on elements that can be improved. structured in the following directions:

Evaluation of the practice activity -IDENTIFIED PROBLEMS

Regarding the assessment made by the students practice the majority stated that it reflects the efforts and results achieved by students, but there were exceptions, which showed the best responses in focus groups conducted with students. The most important aspect in this regard was the work of the teacher coordinator in situations where students were happy, practice managers were described as "objective" and constantly monitored the work of students, working with the tutor from the company where students have completed the practice.

1. Working poor or lack of collaboration between practice managers and practice tutors. "to be assessed correctly there must be collaboration with the supervisor of practice" (student-Suceava P2);

"nobody was interested in what and how we got the ratings firms. He put some questions and gave answers based on the verdict. Without actually knowing what you did in the internship. I had colleagues who did not practice at all, did the project as required for the project knew that he had done but did not practice. But he did not actually practice. Like any theoretical project. "(student P2-Suceava)

2. Low practice responsible involvement in the monitoring of student activity:

"Maybe teachers should call and check Since we oversee the teacher receives a bonus for that should make a bit of interest if all received money for work that. "(student P1-Timisoara)

3. Severity responsible practice and fairness of the practice of responsible in the evaluation process:

"I really did not seem right to me. Because the new area I had made a folder with a certain content. I scored a 10 and I did everything I had to do in that folder, and others who were not even a quarter of that file have taken all the same note. "(student-Univ. Oradea)

Access to practice unit

Access to practice facilities, reported students participating in the focus group

- personal relationships: "My mother knew someone from the Carpathian Bank but could not take me there and then spoke to someone at the Romanian Bank."
- Searching one: "I went to the bank that are in the area and I've got Banc Post card from them, was close to home and I went to ask them and I was accepted"
- With the support of other projects for faculty or students.

Carrying out practical work

Elements of communication-with peers, the coordinator, faculty tutor, networking, organization, administration, accumulation of knowledge, skills, strengths, weaknesses

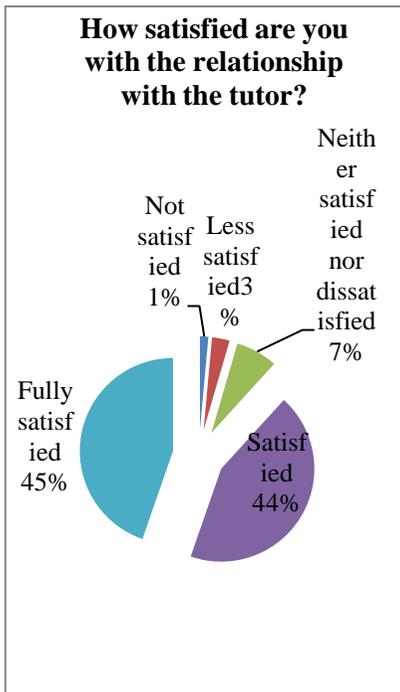


Fig.1. Satisfaction with the tutor relationship.....

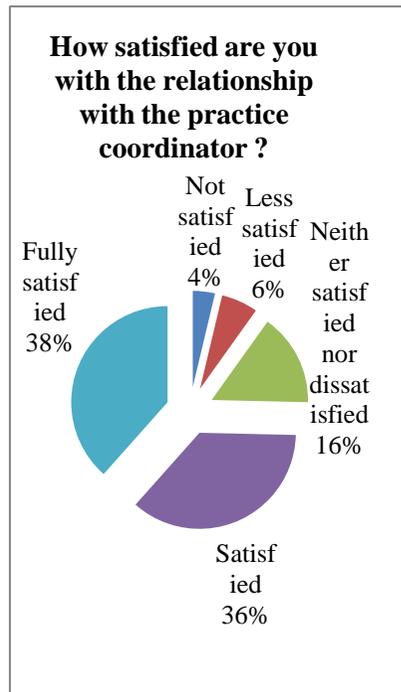


Fig.2. Satisfaction with the relationship with the coordinator of practice

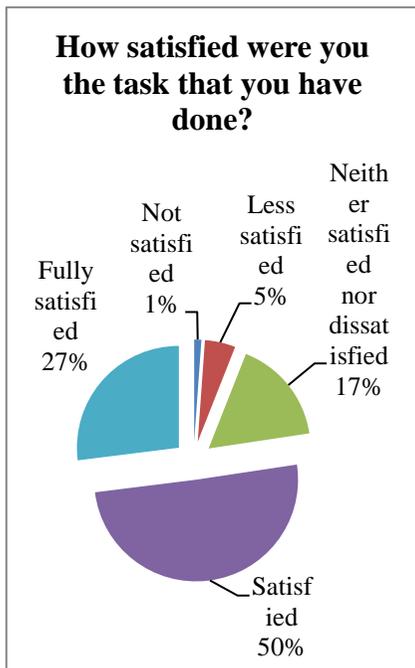


Fig.3. Satisfaction with work

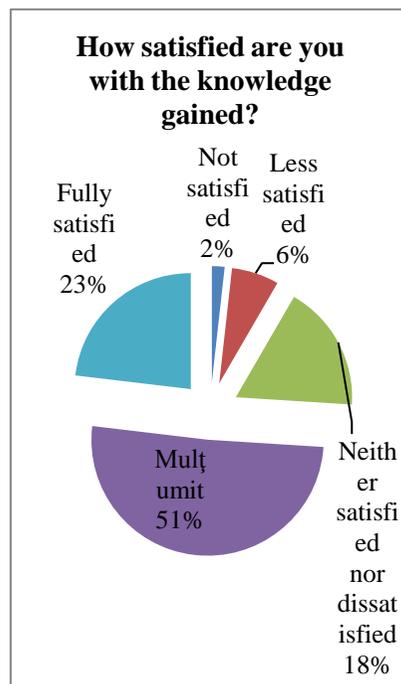


Fig.4. Satisfaction with knowledge gained

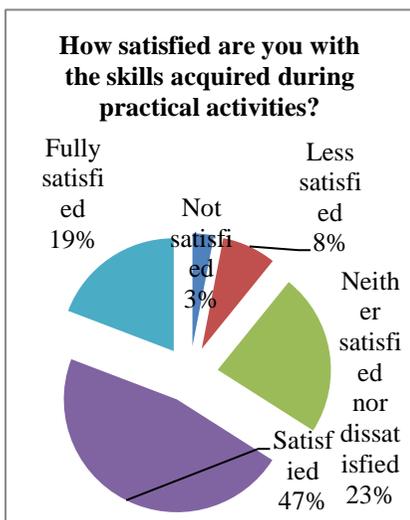


Fig.5. Satisfaction with the skills acquired during practical activities

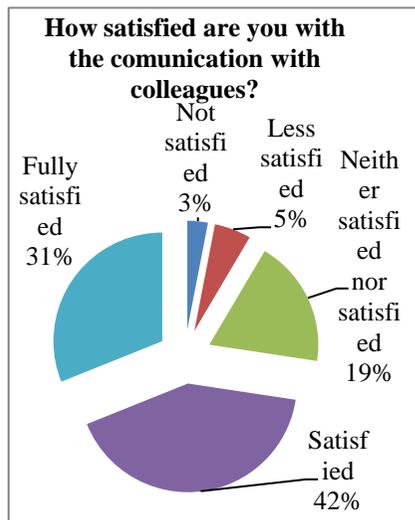


Fig.6. Satisfaction with the acquired during communication with colleagues

Positive aspects

The analysis of data on positive aspects, most responses were for knowledge / skills gained (321 responses) responsibilities (132 responses); familiar with teamwork (126 responses).

Negative aspects

In order of most responses to the negative aspects category, they were not given too much responsibility for me (114 responses), the indifference of our employees (129 responses); powers unite internship inefficient (80 responses)

Opinions on improving students' practical work

1. Practice calendar so as not to overlap with the holidays. Practice period: in this sense the most comments were related to students unable to participate during the summer because they are working or wish to do so. There have been several recommendations are to be held within three weeks during the semester or one day a week throughout the semester, there are more opportunities so that students can choose how to best address its needs.

2. Duration, the problem appears to be contradictory too much time considering some students and others as insufficient for a good education.

3. Compensation or reimbursement for transportation students: "Do not just give you interest if you are not rewarded, and even a symbolic thing, but to work at a restaurant ECTS simply take advantage of you, make you do all sorts of chores for which others get a lot of money and make you think that they do you a favor that they write a certificate at the end, "(student P1-Timisoara).

4. Contacting companies - units of practice by faculty representatives: "I think that would help us a lot and faculty if they conclude some contracts between companies and faculty, a kind of collaboration. [...] Should be appointed and companies from one person to take care of us that handle our training, "(student P2-Suceava)

5. Targets and a work plan to the student: "Companies that get students to practice have developed programs, objectives so that students learn something from practice." (Student P2-Suceava)

6. O. In addition to the recommendations of students explicit mention one aspect that I consider particularly important in the organization of the practice, as shown in group discussions: student involvement and accountability to the work that taken. As in all three partner universities have told students to focus group participants, students will learn during practice to learn, ask questions, to make the best of their respective actions.

The need for involvement / responsibility of students:

"and basically what I could do all day. I went to the office, if I wanted sitting on the mess, if I wanted I went to see how to make insurance ... Basically it was my decision. And many colleagues met with the thing: if you want something if they did not - not. And many do not drive had to go to practice: if you want go if no - no, not forcing anyone. So you must have a strong will that if you can go, even to go and learn to say "go, teach me, to twitch" (student-Univ. Oradea)

T. The need for involvement / responsibility of students:

"Q: And then what have to be changed in your opinion?

A: The attitude of the student. If the student wants he will find a certificate. "(student-P1-Timisoara

S. The need for involvement / responsibility of students:

"I think it depends on the objectives that we want have when we practice. It's not just blame the companies. It is also our fault, because if we do not want to learn as much, no interest no one in forced to do anything. I believe that is possible in Suceava.. If you are interested and want to do something - you can not just go on and on primary relationships. "(student P2-Suceava)

Conclusions:

- The needs of students identified by this study, come to once again emphasize the need for dialogue between the actors involved in the practice and pursuit of improving teaching practice in both the organization and in terms of content.
- The objectives of our project aims, through its activities to cover the practical needs of students so that results from this needs assessment were the basis for discussions during the Workshop PRACTeam with student representatives, tutors and practice coordinators participations. Based on the central problems and issues that emerged were developed practice materials for both tutors and students.

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ANALYSE THE CAPITAL STRUCTURE AND PROFITABILITY OF AGRICULTURAL CORPORATIONS

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For 21 years since the change in Hungary's economic system, the capital structure of agricultural enterprises notable modified. The regime change that passed off two decades ago did create significant alteration in the situation of agrarian sphere and it affected property and holding relations as well as internal and external market positions and therefore also the financing system of the sector. The present study discusses the capital structure of agricultural enterprises and analyses the connection between capital structure and profitability. Defining the optimal capital structure have for a long time been a focus of attention in many academic and financial institutions that probe into this area. This is comprehensible as there is a lot of money to be made advising firms on how to improve their capital structure. My empirical analysis is based on data containing 192 agricultural enterprises from Hungary between 2002 and 2009. I made regression analysis for an empiric proof of capital structure theories and cutpoint analyses to study the credit distributing phenomenon by Stiglitz since in the subject of the database I searched the significance of wontedness and slant that marked damage of normality at many factors, furthermore in many cases even the terms of a dispersion homogeneity were not certain. Because of repeated damages of the two modelled T-test, a specified comparison of distribution seemed to be expedient within the confines of a cutpoint analyses which I performed with the assistance of the ROPstat 1.0 statistic pack of programs.

I try to assess the reasons of the changes in the structure of resources of enterprises in order to find the determinants effecting the capital structure. Furthermore, I determine the capital structure with that profit running could be achieved in the most effective way. As a result of my review I can state, that the capital structure proportions take serious effect on the fluctuation of profitability and I defined a proportion of foreign capital and own capital which if reached or exceeded, may lead to operation producing deficit.

Keywords: capital structure, liabilities, Hungary, profitability, agricultural enterprises

JEL Classification: G320

I. Introduction

Analysis of capital structure of agricultural corporations is a key issue of economics and the effect of its fluctuation can be observed on several fields of the life of corporations. It yields influence shall I say the competitiveness of the sector, property status or financial and profitability situation of corporations, effectiveness of management, market value of the company as well as the expectable output rate of equity for owners. Though term of the analysis concerns years between 2002-2009, in the case of a research of capital structure - since these are long term decisions - particular changes of politics and economy in the last 1-2 decades shall not be forgotten in so much as Hungarian agriculture still carries almost all the weight of the agrarian crisis following the regime change.

The regime change that passed off almost two decades ago did create significant alteration in the situation of agrarian sphere and it affected property and holding relations as well as internal and external market positions and therefore also the financing system of the sector. As a result of the referred processes the capital status of agrarian sector passed through important changes since unfavourable turns of economics also reflect in the conformation of capital structure.

The main aims of my study are the followings:

- a) In the scope of a literature processing I lay and esteem the most important views, the dominant classical and modern theories of capital construction and definitions in connection with financing.
- b) As a main aim I study the analysis of fund- and capital construction of joint agricultural corporations running in Hungary in the period between the years 2002-2009. Within the scope of the analysis I enter into the following details:
 1. Analysis of the relationship between capital structure and profitability, revealing determining factors of profitability and defining their effects. In this manner, I am looking for the answer whether selecting capital structure should take effect on the fluctuation of profitability of corporations, and if so, how.
 2. Determining the capital structure with that profit running could be achieved in the most effective way. Analysing the connection of leverage and profitability, should there be a sort of equity proportion definable along which companies' profit running could be ensured.

II. Literature analysis

One of the most significant issues in corporate finance is responding "How do firms choose their capital structure?". Defining the optimal capital structure have for a long time been a focus of attention in many academic and financial institutions that probe into this area. This is comprehensible as there is a lot of money to be made advising firms on how to improve their capital structure.

There are many methods for the firm to raise its required funds, the most basic instruments are stocks or bonds. The mix of the different securities is known as its capital structure, so it can be defined as the combination of debt and equity used to finance a firm. And the target capital structure is the ideal mix of debt, preferred stock and common equity with which the firm plans to finance its investments. (Pataki, 2003) Every enterprises has liabilities that must be dealt with, regardless of the enterprise's incomes or revenue. These liabilities raise the fluctuation of revenue, the instability of revenues. The risk-raising effect of constant liabilities is called leverage. Two types of leverage can be distinguished, the leverage effect of constant expenses related to using assets is called working leverage or operating leverage (DOL). The risk-raising effect of constant expenses related to liabilities is called financial leverage (DFL). Using both types of leverage by an enterprise is called combined leverage (DCL). Firms tend to avoid the very high gearing levels, because of the financing distress risk. This could be induced by the requirement to pay interest regardless of the cash flow of the business. (Harris and Raviv, 1991)

There are many theories of optimal capital structure. The first breakthrough came with Modigliani and Miller's theorem, which specifies conditions under which various corporate financing decisions are irrelevant. MM Proposition I. concerns about the irrelevancy of the value to capital structure. MM Proposition II. implies that, the higher the debt-equity ratio, the higher the expected turn on equity. (Modigliani-Miller, 1958) Later Modigliani and Miller showed that when corporate taxes are included, the value of the levered firm is equal to the value of an unlevered firm plus the present value of the tax shields associated by debt. This third step in capital structure theory was first suggested by Baxter and later modified by others. In this way, bankruptcy costs are introduced. Now the value of the firm in bankruptcy is reduced by the fact that payments must be made to third parties other than bond- or shareholders. The next step in capital structure theory was the introduction of personal taxes in 1977. Miller showed that, a "nothing matters" situation arises when you combine corporate and personal taxes. Most recently, the assumption of comple contracts is relaxed. Instead, contracts are assumed to be oncomplete, i.e. they don't specify precise provisions for every conceivable future event. And apart from the

theoretical literature hundreds of papers try to empirically test all the different capital structure theories.

III. Research methodology

In the scope of my study calculations in connection with the analysis of fund- and capital structure of agricultural corporations are based on the Testwork database operated by the Research Institution of Agrarian Economy. For the sake of better comparability of the data, I drew into the analysis only those companies among corporate farms which appear in the testwork system under constant running every year between the period of 2002-2009. Accordingly there are 192 companies that match my conditions, of which a notable number could be classed in the plant producing group of GOFR. Besides, regarded to the size of the plant, around 85 percent of analysed companies come under the 2 largest size category defined by AKI with rates over 40 EUME (European measure).

I used regression analysis for an empiric proof of capital structure theories and *cutpoint analyses* to study the credit distributing phenomenon by Stiglitz since in the subject of the database I searched the significance of wontedness and slant that marked damage of normality at many factors, furthermore in many cases even the terms of a dispersion homogeneity were not certain. Because of repeated damages of the two modelled T-test, a specified comparison of distribution seemed to be expedient within the confines of a *cutpoint analyses* which I performed with the assistance of the ROPstat 1.0 statistic pack of programs.

IV. The results of the research

1. Capital Structure Attached to Profitability

In scope of relation analysis I looked into the factors defining capital structure, the existence of connection between index numbers describing it and the strength of this connection as well as how an existing connection could be described and expressed. I meant to test the correctness of the following pieces of hypothetical:

Hypothetical I.: *Rates of capital structure are in functional connection with the main parameters describing financial and income situation of agricultural corporations.*

Hypothetical II.: *A certain combination of chosen balance items (variants) could serve an explanation for the fluctuation of profitability indices.*

Thus I performed regression analysis of studied database on the base of two starting point. In one case I was trying to find the answer for what influence the capital structure indices, which may describe fund structure the best and are chosen by me, take on the financial and profitability situation of the corporation; whilst due to the second calculation I was looking for the answer for which of the variants filling a part in development of capital structure is in functional connection with the fluctuation of profitability indices.

Of the results of relation analysis for instance the connection between the profit in proportion with assets and funding items could be mentioned, which are described in table 1. It is clearly visible that profit in proportion with assets is in strong, negative connection with the proportion of credits lodged from owners in total capital; a change of 100 percent degree of that proportion would lower the rate of profit index by 27,3 percent degrees. Similar to credits lodged from owners, the studied index is also in a negative way of correspondence with proportions of long and short-term liabilities, however in the case of the latter the correspondence is not significant. Index number of fitting to the regression equation (R-square) is 0,41 that is to say the calculated model explains 41 percent of variance.

Results of further calculations also confirmed: fund structure proportions take serious effect on the variation of profitability. Symmetry of equity shows positive connection between profitability

indices and the fluctuation of liquidity, moreover the raise of foreign capital proportion on the whole goes together with the lessening of taxed throughputs.

Table 1: Regression Analysis of Asset-proportioned Profit

	SS	szf	MS			
Model	0,35731357	4	0,0893284	N=192		
Residual	0,52048588	187	0,0027833	F (4,187)=32,09		
Total	0,87779946	191	0,0045958	Prob > F = 0,0000		
				R ² = 0,4071		
				Adj. R ² = 0,3944		
				Root MSE= 0, 05276		

ROA	Coef	Std.Err	t	P>|t|	95% Conf.Int.	
Accumulated profit reserve	0,062473	0,0151783	4,12	0,000	0,03253	0,092416
Loan from owners	-0,2728433	0,0409874	-6,66	0,000	-0,3537	-0,19199
Long term liabilities	-0,0564566	0,0347335	-1,63	0,106	-0,12498	0,012063
Short term liabilities	-0,1098727	0,0259791	-4,23	0,000	-0,16112	-0,05862
Const.	0,0636366	0,0104536	6,09	0,000	0,043015	0,084259

Source: Own calculation based on database of testwork system

2. Definition of Capital Structure Proportion Describing Effective Management of Agricultural Corporations

After having reviewed the connection of capital structure and profitability, in the followings I am looking for the answer whether in the studied 8 years should be a kind of capital structure considered to be general, due to which it could be stated that it couples to management producing profit or deficit instead. I plan to test the correctness of the following hypothetical:

Hypothetical: *According to joint agricultural corporations researched, (specifically to orientation of activity or to size in certain cases) a sort of proportion is detectable between foreign capital and equity as well as at credit files, to which its profiting connects.*

To confirm this hypothetical, conventional statistic methods were not adequate since according to several variants drawn in the analysis, tests of both normality analysis and scatter homogeneity marked damages of adapted conditions; this is why I searched my idea through outpoint analysis. I defined a proportion between foreign capital and equity which could be regarded as this: that proportion or a rate over it goes together with deficit in operation. I found that only 40 percent of corporations producing deficit and at the same time only 12 percent of those producing profit have leverage index over the rate 1,55. It also could be appreciated remarkable that almost 100 percent of corporations producing profit bear index numbers under 2,5 however, one out of five of those producing deficit have higher rates than this (table 2.) I performed the same statistic process in the consideration of the liabilities' proportion within fund construction and on this I

found that more than 60 percent of studied corporations producing profit operate credit proportion under 40 percent however, almost 70 percent of those producing deficit have rate proportion barely over this. Due to my results break-out possibilities for corporations already producing deficit are tightly limited, banks found granting credit to them is risky; moreover they have slight opportunity for development and by this flare and profiting operation by self strength.

Table 2: Specified Comparison on Distribution of Leverage

c	F1(c)	F2(c)	F1-F2	Korrekt%	Phi	Coef.	Khi|Fish	P	Adj. p
-52,24	0,015	0,000	0,015	50,7	0,10	0,00	Fisher	0,3490	
-15,39	0,030	0,000	0,030	51,5	0,14	0,00	Fisher	0,1206	
-3,43	0,045	0,000	0,045	52,2	0,17	0,00	Fisher	0,0413	
0,55	0,313	0,368	-0,055	52,7	-0,05	1,28	0,572	0,4496	1,0000
1,55	0,612	0,880	-0,268	63,4	-0,31	4,65	Fisher	0,0000	0,0003***
2,54	0,791	0,960	-0,169	58,4	-0,27	6,34	Fisher	0,0005	0,0041**
3,54	0,836	0,976	-0,140	57,0	-0,26	7,99	Fisher	0,0007	0,0056**
4,54	0,881	0,976	-0,095	54,8	-0,20	5,51	Fisher	0,0175	0,1403
5,53	0,940	0,984	-0,044	52,2	-0,12	3,90	Fisher	0,1857	1,0000
6,53	0,955	0,992	-0,037	51,8	-0,12	5,81	Fisher	0,1231	0,9848
7,53	0,970	0,992	-0,022	51,1	-0,08	3,82	Fisher	0,2792	1,0000
9,52	0,985	0,992	-0,007	50,3	-0,03	1,88	Fisher	1,0000	
10,51	0,985	1,000	-0,015	50,7	-0,10	....	Fisher	0,3490	
47,37	1,000	1,000							

Source: Own calculation based on testwork-system database

V. Conclusions

Dealing with the theme of optimal capital structure is current. The decisions of it is critical not only because of the need to maximize returns, but also because of the impact such a decision has on an organization's ability to deal with its competitive environment.

Through relation analysis I prove: capital structure proportions take serious effect on the fluctuation of profitability. Symmetry of own capital (also proven statistically) shows positive relation of variation of profitability indices and liquidity, furthermore, raise of proportion of foreign capital couples with diminution of taxed throughputs: influence of its payable interest flow in taxed throughputs.

With the assistance of cutpoint analysis (also either specifically to orientation of activity and size) I defined a proportion of foreign capital and own capital which if reached or exceeded, may lead to operation producing deficit.

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ABOUT OTHER KIND OF PRODUCTIVITY AND GROWTH (HOMO-SAPIENS TO HOMO-OECONOMICUS)

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Part of a larger research, this paper ranges among the matter of ideas confrontation concerning the causes of the economic crises and those keys to be passed. Paper aims at finding and praising the defining elements of our economy, in the purpose of better understanding the nowadays crisis, and at presenting certain conceptually different approaches. In this purpose, analytical presentations are focussed on the specific realities of the economic life that are in position in the last centuries, which are considered to be favouring the arriving to the critical states in the last years and to be promoting those maintaining, or which allow explaining certain effects and tendencies.

The approach is made from the angle of the nature of the productivity that is had in view and highlighted in the market regulating mechanisms, and of the due growth. The paper is grounded on important analysis on the matter (including anterior researches of the author), but their dimensions does not allow their presentation in the abstract. Analysis starts from interpreting the very nowadays crisis, from different sites concerning the core (general) causes, by correlating with certain features of the industrialized consuming society. More recent references are made in the literature on the matter. Modern western economy is defined from the angle of focussing on material-quantitative productivity and growth. Analysis tries to explain certain effects concerning this kind of focus. Interesting effects and tendencies are noticed, that miss to the traditional approaches. Further on an opposed theoretic model is discussed. This is built and developed inside the service economy (on the case of two conceptually similar approaches, came from two different sources of economic thought in the field; original contributions of the author are involved). Adequately to the knowledge society, this last one is considered more favourable for homo sapiens, at least once the visible effects of the last two hundred years model are revealed, which are dominated by homo oeconomicus. This reference model being set up, a short foray is intuitively made in the perspectives of humanity on long run and on very long time, in the supposed maintain of the present economic model. In all those presentations and analyses, connections are made with other papers on the matter, in the purpose of more profound study.

The conclusions concern the practical possibility of the model opposed to the industrialist economic crisis. The details highlighted from the analysis of the conceptual comparison between models and prospections bring, in the final, at proposing solutions, grounded on fundamental requirements on the line of humanity's values, with didactic addressing to the young generation. The elements of contribution of the author are underlined in the presented matter.

Keywords: productivity, modern growth, economic crisis, knowledge society, service economy

JEL: A13, H49, I25

1. Introduction

The nowadays crisis looks like a systemic crisis of the whole life of humans that was (and still is) approached in the modern tidiness, just like in the times of industrialization.

It looks like humanity arrived to the limits of a way of living that proved itself to be destructive for the planet and for the living of our own species on a very long time.

That what is certain is that, for Romania, the crisis is total: Romanian scientific research rather does no more exists, that we are integrated in Europe on positions of a marginal country, that Romanians are importing the most of the apples and potatoes they eat, that our country is in

enormous debt to the foreign banks, that the Romanian education lost all its chances to come back to the performances it had two decades ago, that the health of the population is under the impact of certain decisions of the same (and rather generalized) principle of elimination (and not of construction) etc.

For the analysis of Romania's economy can be invoked the exceptional book of Marius Băcescu and Dionysius Fota (Băcescu and Fota, 2009).

In this paper we will bring the discussion mainly in the field of *service economy*: this was that what made possible the necessity of approaching productivity, efficiency and growth in widened horizons to be seen. It happened in the postmodern epoch, when the traditional view was replaced, by taking into account certain social aspects and other, more than the monetary narrow economic. For a Short Literature Review, please also see the chapter no. 4.

2. The crisis of the world as a capitalist extensity spread

In opposition with the well-known growing intensity by industrial means, that is usual and preached in the theories concerning the modern world, the consuming society meant rather a simple spread of a model – the capitalist one – as Issac Johsua shown (Johsua, 2006). In the chapter 7 „« Nouvelle économie » ou l'utopie du capital”, the author we cited spokes about “over-accumulation” of capital, meaning accumulating it in a rhythm that the economy cannot support, on a long run, the profit ratio anticipated by those who supply the funds. The financial capital of the world brought us in crisis, sais Issac Johsua. This research, published before the nowadays crisis, spokes about the generating conditions of what followed – as we have all seen. “The crisis of «the new economy» was not surmounted, but only stocked in the accumulated lack of equilibrium”, sais the author at pp. 240. The superficial character, from the economic point of view (founded on “moment solutions”, having beneficial results in the short run, but generating spread effects, including in the long run, aggravating effects) is exceptionally synthesised when Johsua shows that, in critical situations, “America rescued itself just as it lived: on credit. The pick up again was so realised, not by reducing certain anterior dysfunctions of the American economy, but contrary, starting from them, by increasing them.” (pp. 243).

The central goal on the market (and the criterion of “selection” by “competition”) is the gain, found in computed productivity. The method consists in cheating models of economy, by evading its genuine roles of *tool* for covering people's needs; and, by this, the economy is preached like a goal by itself; the slogans of liberty and of “fair competition” in the economy, but the economy that is producing those which are really *necessary* (economy that was dominant two-three centuries ago) is let in the outside of the efficiency: there is *else* that the market acknowledge and admits as rewarding and moneymaking; i.e. the gains are from winning in the “fair” competition, including the intense exploitation of the natural reserves, speculation etc.

A main result is that primary needs, as food, and flu and tuberculosis cure) are abandoned to the market laws, *at a subsistence level*: they are maintained in this way in the “poverty trap” (this matter is developed in our paper Jivan, 2008).

The existence of mass poverty also annulates or maintains to a minimal level the qualitative improving trends – which should be correlated with the increase in the price. The price increases very much, for relatively low improvements, for strictly opulent improvements, for advertising and mostly for good indicators established by the rate agencies (which are private firms and have private interests too); quality decreases for the low price levels – having as a unique alternative the total give-up to those supplies.

Prices are judged not in function of the quantities, but according to percentages of the revenues allocated to those buys. So, the situation (the current, given situation), of the existence of significant revenues above the fundamental needs (which can receive the most varied destinations, it is too little in the direction of improving or increasing alimentation) generates this marginal state of agriculture in the capitals beholders' economic action options. The issue of

sponsoring agriculture is a mechanism which is external to the market, from outside the free competition, which tries to correct a situation (fair from the market logics point of view), which risks leading to a dangerous diminishing of the agriculture weight in the entrepreneurs' options. The suppliers remain attracted – according to the market criteria, as well – by the luxury consumptions segment. Disequilibrium at the individuals' level results (Jivan, 2008). The optimizing system does no longer work, as well as the self-regulating mechanisms. A waste of values, of resources, of efforts result; this generates inflation.

3. Usual perceptions, including in the periods of crisis

It was shown (Jivan, 2010) how, in the traditional (classical) economic model, profit and interest are usually seen as varying with capital amount, economic growth being generated by material investment, which is about quantitative growth of tools, machines, money and other forms of capital employment for production which generates quantitative growth of production. But the economic growth can be better generated by growing returns: productivity and the quality of being lucrative are given by innovation, information, knowledge, science, brains, including the results of human capital formation and education; growth is varying with inter-relational growth and with intellectual factor. (Jivan, 1995).

The usual angle of approach and level of analysis is that of the accountants' books, as well as the source of data; but in the accountancy books of *business*, the place of such services may be less important than the place industry takes, even if the genuine essential generation of things has another logics (from Jivan, 2009). The understanding of the economists must go above the *businessmen's* reasoning.

Such a wrong approach is also in certain government policies concerning education and scientific research. Unfortunately they let us see the state of our country.

We discussed the materialist fallacy (classical, or Marxist); it is a big mistake to see mostly the expenditures in services (and blame them all as a whole), because of their immateriality – proving lack of understanding. We have also seen the consumption fallacy (Keynesian). They are as fallacious as any other exaggerations, like any speculating production, aiming exclusively to gain, with no respect for its environment (Mother Nature, social, moral environment). Any activity can be destructive (Jivan, 2010). But at aggregate economy scale (national, world-wide), useful performances are mutual, mostly, one way or another, at least by the mediation of the generalized market (see here our synthesis on the market as global servicing, in Jivan 1996).

Knowledge society implies an opened minded view and an interdisciplinary vision, which are superior to the narrow economic approach, including the care for the social problem, for the planetary environment and such like, among which moral-institutional aspects are also important. Even production and consume are replaced with “functioning” and with the creation of utility; and the place of immaterial activities is really central.

The choice between ways should not be a dilemma: the best permanent answer is *aurea mediocritas*, *the equilibrium* and avoiding any extreme and narrow view.

4. An opposite model

On the line of research opened by service economy, observations, critics and proposals were made at micro as well as macro-economic levels. Between those many research, we mention here only these realized by Jean-Claude Delaunay, Jean Gadrey (like particularly Delaunay, Gadrey, 1987 and Gadrey, 1992 and others), Jacques de Bandt (De Bandt, 1991), Orio Giarini (particularly Giarini, Stahel, 1993 and Giarini and Lauberge, 1997), André Barcet, Joel Bonnamy and many other authors (particularly the papers in *Revue d'Economie Industrielle* - no. 43, 1988). Jean Gadrey (Gadrey, 2010) criticizes the industrialized economy, speaking (at pp. 88) about the “double dictatorship”, (i) of the world markets (that are not regulated) and (ii) of the agricultural “liberal-productivist” politics. He requires a more complex analysis of the productivity of an

industrialized production process: not just the growing productivity of the modern tools and machines, but also the time of work consumed for their fabrication should supplementary be recorded as a cost; a cost that should not be ignored. He also proposes the deduction of the estimated value of the big damages involved by industrialized and chemical production (including in food) and long distances transport: those damages should diminish the pretended growth that modern industrialized productions pretend realize.

Gadrey argues (pp 85-86) that the usual theory of growth and productivity is interested only by the quantitative aspects, making no difference between an output that is protective for Mother Nature, not-polluting, ecologic, on one hand, and an output based on big consumes and waste of energy and less healthy for humans or even worse.

Gadrey speaks about the fact that an investing economic activity and a consuming one are considered to be „equivalent” in the numerical usual analyzes. There is a comparison made by quantitative criteria, with no respect to the qualitative and more profound aspects.

All those critics and recommendations are revealing critical aspects of the usual productivity and growth models. In contrast with the usual (growing, industrialist) model, he proposes, in his large-hearted approach, a new one, using a “new type” of progress, the true progress, profound, not just superficially quantitative and not only on the short run.

Another approach is that of *servicity*, proposed like an extension or even a rebuff to *productivity*, at *The 9th Seminar on the Service Economy* (PROGRES – Programme of Research in the Economics of Services, A.S.E.C) in Geneva, September, 6th -7th, 1993. Firstly included in a paper published in the review of *Services World Forum* (Jivan, 1993), the concept was later developed in other papers and books. The concept of *servicity* is grounded on the point of view in the modern marketing optics and on service economics.

The concept we call *servicity* would mean exactly the effective *intrinsic* productivity, the effects of human activity consisting in generating *general* and *absolute plusses*. It is in opposition with *computed* productivity, generating palpable *concrete plus* to the concerned individual, therefore *relatively* to a specific economic agent (with no concern with the rest of the world, with the ensemble)

Such approaches prepared the conceptual field for the European requirements of knowledge society and knowledge based economy, of more seriously taking into account the natural and social environment. Ulterior, the ideas were developed, and between the most recent exemplificative research we mention those on innovation, productivity and performance, of Faiz Gallouj (Gadrey and Gallouj, 2002, Gallouj and Djellal, 2010), Faridah Djellal (Djellal and Gallouj, 2008) and others.

As concerns the matter of indicators, between the preoccupations in the field, we limit us to mention only about the important European project known (shortly) under the name of Stiglitz – one of the two big Nobel Laureates economists who are mastering, together with Amartya Sen, those research, to what work numerous and other big specialists.

5. Long term prospects of humanity

Mankind should see that, in business practice, the narrow pursuing of the goals of profit (and calculated productivity growth) and the interest and gaining principles, brought us in the position of buying the water from stores (please see the developments of the matter in Jivan, 2011), and there already are first signs of buying also the air (another vital genuine resource) on the market in a foreseeable future. The bear conditions for life are *sacrificed for gaining more money*. In these conditions, mankind should apply another widening of horizons, like Marshall made (please also see our Jivan, 2011, where from is the presentation here): the impact of the activity of people on the environment, the impact on Mother Nature and, implicitly on its own future (on a longer time that market can appropriately manage) should be considered.

Humans can already see that the most important must be the *entire existent* (the notions of Nicholas Georgescu-Roegen can be used or Gheorghe Popescu's „the Joint Living Whole”, in Popescu, 2006), including the environment, and the *utility and costs*, for it, of the output, of the whole economic activity and of any human act. People should no more use only the individualist approach, and should take into account not only the economic actors (both buyer and seller), but also the others, directly involved and not involved, present and not present, the entire environment of the persons directly decisive in the trade, from the most comprehensive point of view: in the space as well as in the time dimensions. It includes the whole human society, Mother Nature, the Planet, the not-yet-born generations. And it takes into account different means and fields of action in the human society.

Centuries of industrialism and market domination passed and the effects of the market values (determined by short and medium interests and regulated on the long run only by mercantile criterion – costs, gain and profit) become to let be seen the planet destruction.

In such a widened approach, firstly the economic science (and, by time, all humans) should take into account the *costs and effects for all* the parts of the reality that are affected, even if they are active or passive parts, even if they wanted or wanted not to participate to the processes of humans' economy, even if they were not warned or they did not know at least that they are involved in the economic process and effects, even if they are present or not yet born.

Furthering what Marshall made, we could surpassed the strictly economic angle of perceiving reality, which proved already to be also too narrow: we should introduce a third category of time, for having a more complete comprehension of events, in space and also in the historic view. The short run and long run must be completed with the very long term, proving the historical capacity of perception of our human species. In the post-modern understanding of realities, humans must already have the clear-sightedness to accept that if the same way of living is persistently pursued, no chance will remain.

Georgescu-Roegen hardly tried to teach us about another kind of economics we should study, learn, teach and apply, but he was marginalized (Georgescu-Roegen, 2009) – may be precisely because of this attitude.

6. What can we, still, make?

In despite of the usual principles of competition (invocate also by the economic traditionalist approach – still dominant), the special human (superior to the strict economic and short run) principles are surviving, (even in poorness or in societies what are week from the economic point of view), like also a big enough number of their bearers and preachers. Their extension and spreading is not an exception, but a tendency, mostly in the knowledge society: it is and should be consistent with it.

The mercantile values represent just a tool and must remain a tool. In our times, *homo-sapiens* must now show his *superior knowledge and thinking*: superior and much more widen than the simple economic one. And must teach and *widen the mind of homo-oeconomicus too*. *This is the fight of our times*. The task is in the field of learning and of teaching the young generations, not in the spirit of private speculation, but in the team spirit of work, care and concern for the whole environment, as a common good for living. *A superior rationality must be put in*.

The economic functioning can be oriented on realizing the general well-being and on attending the interests of the whole *human* society, exactly and just by a well-considered and well-settled legislation – which points out the optimizing valences of the market mechanisms. (Jivan, 2009).

Science has the new task of knowing how and when the market mechanisms act in an improving direction: “how and when” means the legal *conditions* requested (*that society should settle*). A superior outlook upon the final (compensated) results of the efforts and effects of any human activities is necessary. Efficiency should not be no more narrowly limited by the economic criteria, but should concern the best for the person, for the society, for the world, balanced

between the present and the future. Taking into account the disequilibrium we spoke about, we propose analytical studies concerning a certain criteria system in the matter.

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ECONOMICS ON THE ROAD TO THE DEVELOPMENT

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The paper aims to stress if a certain economic model can lead towards economic development. We will try to understand and explain if certain economic measures taken by well developed countries can be used by emerging countries.

We will take into consideration along the public policies also the influence of foreign trade into development of different countries.

Is it possible that one country to have economic decrease and in the same time to have an important increase in the international trade? Seems like the answer in the case of certain Eastern European Countries to be yes.

Even so it is a matter of reestablishing importance of different fields in national economies in order to use the outcome in increasing the level of well-being of individuals.

International trade is maybe the most important tool to increase or decrease deficits. The international trade policy is usually influenced by the public and fiscal policies inside one economical area (national area).

If we analyze the world's area in which the international trade is having the highest impact on GDP we for sure might say that also those countries are experiencing a high degree of economic development. Also in respect to the public sector those countries are having high degrees of public deficit.

Government spending grows in open economies as a mechanism to compensate for the adjustment costs of trade openness. Small and open countries, which are affected intensely by world business cycles from which they cannot easily insulate themselves through standard macroeconomic policies, choose to maintain high levels of public consumption and transfers to protect workers in their losing economic sectors. High levels of spending are therefore understood nearly as a functional requirement for the maintenance of internal stability and peace. Moreover, high levels of government intervention are seen as a way of overcoming market failures in the provision of skills and infrastructures: they ease the transition of the unemployed to the more dynamic areas of production in countries that need to compete in world markets to survive.

Can we create a public policy that will support the development using the vehicle of exports? Can this be the solution for decreasing deficits and be a start for a new development even in conditions of economic crisis?

Keywords: economic systems, development, public policies

JEL Codes: B21, B22, E20, E30, E50

1. Public policies

What is more important in the development of one country? What should be the final goal? Our opinion is that the most important thing is the level of well-being of all citizens within a geographical and economic space.

This being said the next step that we should take into account is the size and shape of the economy defined as public or private sector. For sure if it would be to define the type of economy that will probably determine the highest benefit of its citizens the answer cannot be 100% public or 100% private. From the experience of the countries that are the most developed in the matter of the well-being of its citizens we can say that the wealthiest countries and the countries with the highest living hope are experiencing a mixture of public and private economy.

Of course the percentage of the national economy for those two major parts is very different from country to country. But what can be very obvious if we analyze the top economies is that the one's to have the minimum percentage of the public spending policy will direct those public investments exactly to those sectors of the national economy onto which the beneficiaries of this public sector are the highest in number.

We can make a comparison between the percentage of public spending in GDP and the real GDP per individual and also the living hope and the result will be striking.

For instance if we need to make a comment on the evolution of the public sector as percentage of GDP we can easy say that, with the exception of the periods in which the world has experienced the two World Wars the public sector has a big and huge increase into the last 100 years.

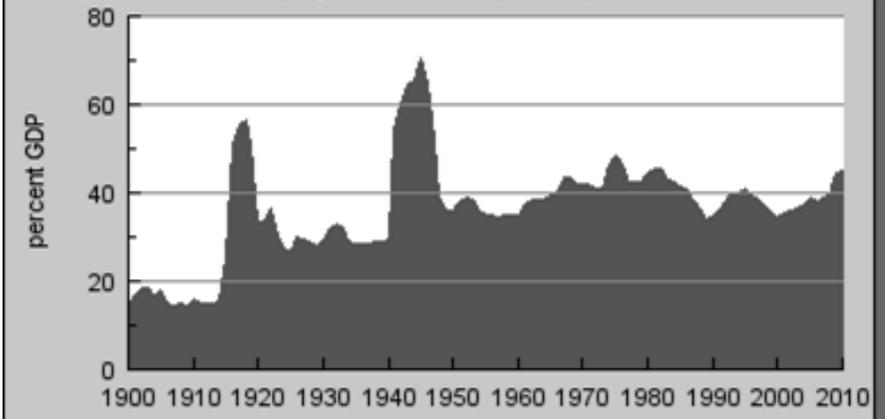
You can see below the example of UK public spending as percentage of GDP.

The analysis is providing the proof that the public sector basically doubled from 20% to 42-43% in 2010. This is also valid for USA. Why have I taken into account those two countries?

Well let me say that between the countries to have the highest living standard the two countries are considered to be the most liberal countries in organizing the economy

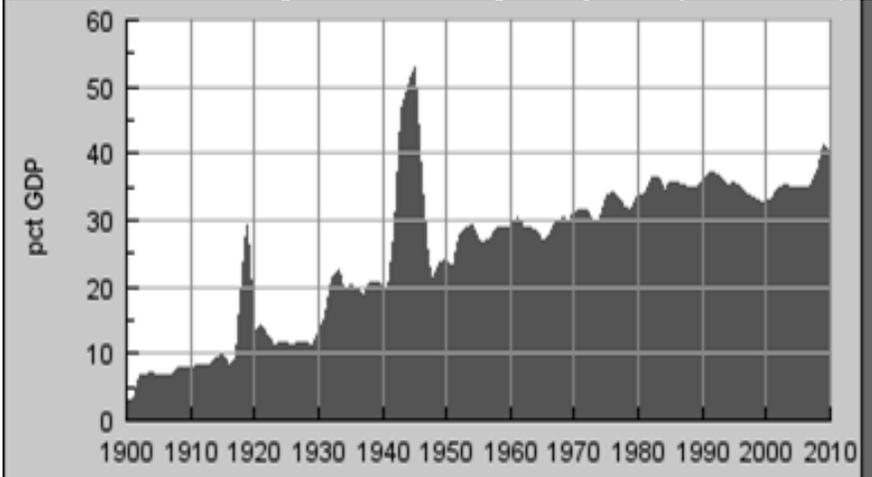
In the graphs below you can see the development of the public sector.

Graph 1. UK Public Spending as % of GDP – 100 years



Source: CIA factbook

Graph 2. US Public Spending as % of GDP – 100 years



Source: CIA factbook

And if we take into account only the last 10 years the increase is even higher. Why this happened?

Maybe from the need of governments to finance the budget deficits or maybe in order to try to try a new path of the national economies, a path that will lead to a higher dependency of the individuals to the national entities and also to ensure the power of national governments in respect to the irreversible process of globalization.

What about government failures? Can one government failure in public policy to redirect the investments into certain emerging countries? Our reply is yes. For instance if the public policy regarding education is not in close link with the labor force market that a public failure will occur. Usually the education field is one of the most conservative fields and this is why the link between the education and labor force market has a gap of at least 4-5 years. From where this gap comes? Well first we need to say that only a few countries have a national policy regarding education and only a few countries are trying to connect the education with the request of the economy. This is happening because the labor force market reacts quite rapidly at the changes of the economy. The companies, employers are requesting what is necessary and useful. Why the educational field reacts with a small gap? Because the specialization of individuals can take from 4-5 years and even more so we can speak about educational cycles.

Can this gap be decreased? Yes one possibility is to produce national educational programs even if this can seem a limit of the liberty of individuals. It is only a plan to reduce unemployment due to the linkage of education to economy.

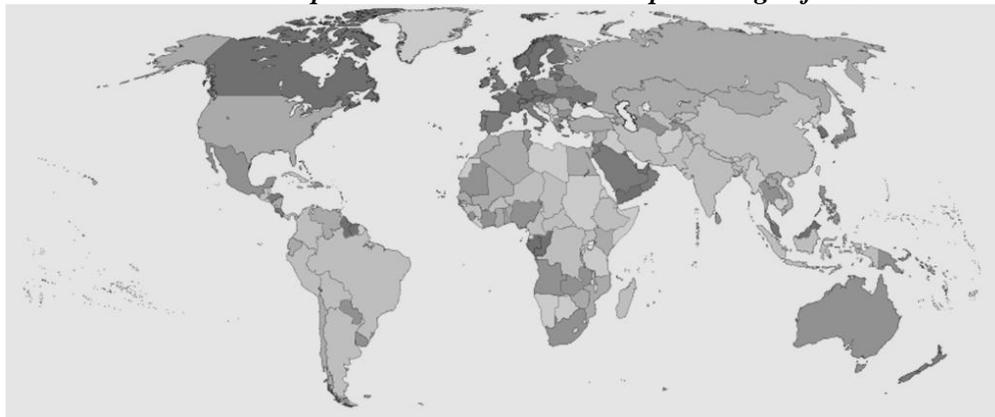
So if this is an example of governmental failure what can we put in balance in order to strive the economic development? Here can be the influence of fiscal public policies in sustaining the development of the national economies and one the possible ways is the policies in link with foreign trade.

2. International trade a tool to decrease/increase deficits

International trade is maybe the most important tool to increase or decrease deficits. The international trade policy is usually influenced by the public and fiscal policies inside one economical area (national area).

If we analyze the world's area in which the international trade is having the highest impact on GDP we for sure might say that also those countries are experiencing a high degree of economic development. Also in respect to the public sector those countries are having high degrees of public deficit.

Graph 3. International trade as percentage of GDP



Source: CIA factbook

Levels of gray

45% or more; 35.0–44.9%; 20.0–34.9%; 15.0–19.9%; Less than 15%; No data;

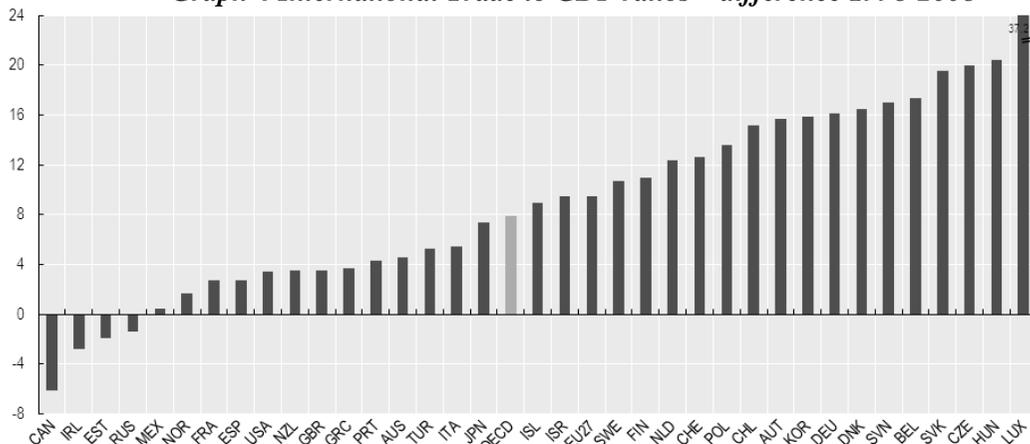
There are situations in which a positive situation in respect to international trade can occur from the point of view of trade balance. It is possible to have a positive trade balance and still economic decrease. How this can be possible? Well in the situations of goods that have maximum imposed prices onto the domestic market, they are imported from the producers with a low cost and then re-exported to other countries in which the prices for those types of products are floating free. This is the case of medicines for example. What will happen with the profit taken from this business? It will be sent to the mother company so that the added value to economic development of that specific country will be basically 0.

The costs and benefits of international trade also depend on factors such as the size of a country's domestic market, its natural resource endowment, and its location. For instance, countries with large domestic markets generally trade less. At the same time, countries that are well endowed with a few natural resources, such as oil, tend to trade more. Think of examples of countries whose geographic location is particularly favorable or unfavorable for their participation in global trade. Despite the risks, many countries have been choosing to globalize their economies to a greater extent.

And this led to economic dependency in link with development and/or economic decrease. This is why so called new countries, emerging countries, have dwelt with the biggest problems in the last 2 years. If in the period of economic development the linkage with the most developed countries from the international trade point of view is a tool of economic increase for themselves, in the period of economic decreases this gap does not narrow but increase. And this because usually those countries to have such a large domestic market tend to develop first the domestic consumption with the domestic production and only after to extend again to other areas.

If we take into account the development of international trade in the last 10 years we are able to conclude that it will be an important tool for the future possible economic development and the globalization process of the last and future years will be the cause of increasing role of trade.

Graph 4 International Trade to GDP ratios – difference 1998-2008



Source OECD Factbook 2010: Economic, Environmental and Social Statistics

How international trade can be used in order to decrease the public deficit and what is the link with the public sector? In order to reveal the possibilities of using this vehicle of decreasing public deficit we must say that policies of investment into exactly those fields of economics that are destined to have the most important role in international trade must be made with priority.

One of the possible solutions can be either the public spending policy to create jobs in the fields that are providing goods with a high degree of manufacturing and also goods that are requested for export or some fiscal or environmental policies to diminish the amount of imports. This can become an important solution to equilibrate the trade balance and maybe for a short period of time to have also a trade balance surplus.

Of course increasing international trade is not always a positive solution for the future and sustainable economic development. If the goods that are exported are mainly material raw for a short period of time it is possible to equilibrate the trade balance, but in future this will lead in the end at a very high degree of dependency with other economies exactly onto those economic fields that have exported previously the material raw. So this is why our proposal was goods and services with a very high degree of manufacturing and to limit the imports, if possible, to material raw.

What we can outline also in the bases of the graphs presented above is that the countries to have the highest rate of economic development and well-being of their citizens are those to have a high percentage of international trade in the GDP. Of course it is not the only cause for economic development but it can be called the top of the arrow of the increase.

3. Deficits and economic development

Can we make a link between public deficits and possible economic development? In the days that we are live in there are two main paths that economies are following. There is the situation in which on country is deciding to cut down expenses in order to decrease public deficits and they are considering this as the best tool to fight economic decrease. But there are a few other countries to consider that increasing deficit and public spending higher than before will be the starting engine of the economic development.

We need to stress that the economic development of the future cannot be similar with the economic development that came after the big economic crisis from 1929-1933. First let us say, on the basis of data presented above that we had a period 1940-1944 with a huge spending from the public sector, coming not from economic but other reasons, so that the periods cannot be similar.

There two ways to understand this matter.

One is the Keynesian way that stresses that governmental spending leads to economic development and also it is one of the causes, and the other economists that are presenting the case vice versa. In their opinion the economic development will make the government to spend more than in early days. Our proposal is a mixture of those two ideas.

The public spending policy should represent a solution for the future economic development. Governmental expenditure is composed of current expenditure and development expenditure. The current expenditures of the government are to maintain basic services that the government provides to the public including the payment of salaries to the civil servants (this is the largest component of current expenditures). Therefore, these expenditures not only facilitate growth prospects but in part promote growth as well. The development expenditures on the other hand are allocated by sector to provide basic infrastructures (such as roads, railways, bridges, ports and airports) to facilitate movement of goods and services across the country. During the early stages of economic growth, these expenditures increased in tandem with economic growth. However, in the 90 s, the development expenditures in particular increased significantly to generate the growth of the economy.

4. Conclusion

Is it possible that one country to have economic decrease and in the same time to have an important increase in the international trade? Seems like the answer in the case of certain Eastern European Countries to be yes. What should be the solution? An analysis of the international trade

in close link with the public deficit and also with the economic sectors of the economy is necessary.

Public policies that will drive the production and trade, national or international, with goods that will be

Even so it is a matter of reestablishing importance of different fields in national economies in order to use the outcome in increasing the level of well-being of individuals.

Can we create a public policy that will support the development using the vehicle of exports? Can this be the solution for decreasing deficits and be a start for a new development even in conditions of economic crisis?

The reply should be definitely yes. The problem is the mean by which we can make this.

The public policies should be driven towards those fields that will be start engines for the future economic development. Our proposal is that those public policies that right now have as beneficiaries' individuals to experience decrease in their incomes should be left on the last place and to increase the governmental spending in the fields that will create jobs and economic outcome. We have as an example the public policies taken by Ronald Reagan in USA and we can be influenced by that. Maybe the investment into production of public goods can be a solution but also the investment on production plants to sustain also the increase of jobs and in the meanwhile an increase in the aggregate supply and not in the end an increasing competition on domestic markets.

Yes public goods production is important but maybe the number of individuals to benefit from such an activity is quite less than the beneficiaries of a production plant or even public services. It can be the case of a public stadium in comparison with public transportation. We must have the decision not only deciding by using the social outcome for the society but also considering the economic outcome, such as possible profit and jobs created.

Governments should take into account, and leave for the period of time after the economic development, to diminish the spending for social benefits and to increase the spending for investments in public sector. Of course this solution will not have the public support, maybe it will not have the same image impact in the society, but for sure it will have a higher impact of the economics of that society.

Also the way that taxes and subsidies are considered right now should be changed. Taxes on property must increase in the same time with decreasing taxes on production and direct labor. Yes the first ones are the most sure but they will not generate economic outcome. The solution can seem both liberal and social. Our proposal is to have a liberal solution for production and public field investment and a social solution for social problems of society. If there is an agreement between economists that public and private economy can and will live together maybe in future we will reach the conclusion that also liberal economics and social economics can be a part of the same market and for a single market.

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THE RELATIONSHIP BETWEEN MACROECONOMIC VARIABLES AND ROMANIAN CORPORATE DEFAULT RATES BETWEEN 2002-2008

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During its 20 year history of market economy, Romania experienced the most severe downturn in 2009, which resulted in many cost, mainly because of the output loss. These conditions forced several firms to declare bankruptcy and to stop their activity. The aim of this research is to assess the relationship between the corporate default rates and the macroeconomic processes in the case of Romania for the period comprised between 2002Q1-2008Q4.

For this, based on the relevant literature, we ranked the potential explanatory variables of the default rates into seven groups: cyclical indicators, household indicators, corporate indicators, external sector indicators, price stability indicators and interest rates, loans to private sector and finally the capital market indicators. Some studies base their results only on accounting data, others only on market data. Our study focuses on both, since this seems to be an adequate approach in capturing most of the processes.

Similar to the banks' loan portfolio structure, we conducted analysis for five sectors: industry, construction, agriculture, services and the overall economy. For each sector the average default probability at time t is modeled as a logistic function of many general and sector-specific macroeconomic variables. The use of logistic regression was motivated by its ability to account for fractional data between 0 and 1.

We found that at least one variable from each group has a significant explanatory power regarding the evolution of the default rates in all five sectors analyzed. In some cases the sign of the variables was the opposite of what the economic theory would have suggested, but it has to be taken into account that Romania posted the picture of an overheated economy during the analyzed period. Another important conclusion was that many variables were significant through their lagged value, which indicates an even better supervision of the evolution of the specific variables. From all the variables, the volatility of the BET-C index proves to be the most important in predicting the evolution of the default rates, as it didn't proved to be significant only for the construction sector. The evolution of FDI and the volatility of the BET-C index proved to be very important in determining the evolution of the corporate default rates, as well. The first was a very important factor in the financing of companies, especially during the analyzed period, and the risk meter is something that never should be disregarded when it comes of analyzing default rates.

Keywords: corporate default rate, macroeconomic processes, economic imbalances, logistic regression, lagged effects.

JEL codes: C22, C51, C52, E32, G32, G33

I. Introduction

In conformity with a research made by the World Bank in 2001, in the period comprised between the end of the 1970s and the end of the 20th century there were 112 bank crises in 93 countries all over the world. Most of these crises caused significant economic downturns in developed countries, as well as in emerging economies (see Wolf, M (2010)). The crises had considerable costs, which affected the whole society (the economic growth remained under its potential level, most of the banks got into governmental property, therefore their debts became the nation's debt (1)). To avoid these costs, several researchers proposed the analysis of the effect of macroeconomic factors on the probability of default in the financial and corporate sector. The aim of this paper was to conduct such an analysis in Romania for the period comprised between 2002Q1-2008Q4.

II. Literature review

We ranked the potential explanatory variables of the default rates into seven groups: cyclical indicators, household indicators, corporate indicators, external sector indicators, price stability indicators and interest rates, loans to private sector and finally the capital market indicators.

Among the **cyclical variables** the most frequently analysed are the real GDP growth, the seasonally adjusted nominal GDP, the value of the GDP-gap, industrial output change and its seasonally adjusted change, the industrial distance to default and the economic activity indicator. Bonfim, D. (2008), Monnin, P. and Jokipii, T. (2010), Boss, M. et al. (2009) and Castrén, O., Déés, S. and Zaher, F. (2008) found significant the effect of the real GDP on PD, but at the latter authors robustness problems evolved. Ali, A. and Daly, K. (2010) found significant the effect of the nominal GDP, Bonfim, D. (2008) the effect of economic activity indicator and Hol, S. (2006) the effect of the GDP-gap on PD. Bos, M. et al. (2009) and Hol, S. (2006) proved the significance of the industrial production index, but the former discovered robustness difficulties.

The second category consists of the **money market indices**: consumer price index, short term/long term real and nominal interest rates, M1 money supply, average nominal interest rates, average lending interest rates for corporate bank loans. In Liu, J.'s (2004) research the average short and long term nominal interest rates, while in Boss, M. et al.'s (2009) investigation besides the short term nominal interest rates, the consumer price index influences significantly the PD. According to Hol, S. (2006) the money supply combined with firm specific financial indicators (2) are relevant explanatory variables of the PD. Finally, the last significant indicator of this group is the average lending interest rate for corporate bank loans analyzed by Bonfim, D. (2008). The next group is related to the **outstanding loans**: the growth rate of the loans and bank loans-GDP ratio. The former indicator was found significant on PD by Bonfim, D. (2008), and the latter one by Ali, A. and Daly, K. (2010).

The fourth category consists of the **capital market indicators**: the US treasury notes' yields with three and six months maturity, the real stock prices, the capital market index change, the S&P500's and some specific companies' yields and the slope of the yield curve. Castrén, O., et al. (2008) point out that the capital market indices and yield curve's slope (calculated as the difference of the long and short term yields) determines significantly the PD. In the study of Duffie, D. et al. (2006) the S&P500 and the Treasury notes' yield with three months maturity proved to be significant in relation with the PD.

Among the **household's indicators**, the consumption, consumption/GDP ratio, unemployment rate, employment rate, the annual growth rate of the disposable income and the growth rate of the household's income were studied. Boss, M. et al. (2009) found significant the unemployment rate in the case of a standard regression model, but in other model specifications their lags were also found significant in relation to the PD.

The indicators of the corporate sector include the Gross Fixed Capital Formation (GFCF), the average labor productivity, the real investments, investment in fixed assets, and the ratio of the

mentioned variables and real GDP. In this group there are also included the following: unit labor cost, real corporate debt and birth rate. In Liu, J.'s (2004) article the birth rate of the companies shows two opposite effects regarding the corporate default rates: on short term the growth of the rate decreases the value of the dependent variable, while on long term increases them. This relationship is examined with an ECM model, but the author did not find any explanations for the observed behavior of the dependent variable. Boss, M. et al. (2009) proved the significant influence of the unit labor cost and the investment in fixed assets/GDP ratio on the PD using a standard regression model. Both in the case of the unemployment rate, and also in the case of the unit labor cost their lagged values proved to be significant regarding the PD.

The last analyzed variable group is the **external sector**, which includes the real exports, the real exports to GDP ratio, oil prices, euro/US dollar real exchange rate and the exchange rate index. Boss, M. et al. (2009) found significant the lagged values of the real exports to GDP ratio, the oil prices and the real exports in explaining the evolution of the PD using different specifications of the standard regression model.

III. Methodology

For each sector the average default probability at time t is modeled as a logistic function of many general and sector-specific macroeconomic variables. The initial logistic regression equation can be noted as:

$$DR_{t,s} = \frac{1}{1 + e^{-X \cdot \beta}}, \quad (1)$$

where $DR_{t,s}$ denotes the sector-specific corporate default rates, X denotes the matrix of the explanatory variables, while β is a column matrix representing the coefficient estimates. The used methodology, based on the work of Papke and Wooldridge, mentined in the paper of Boss, M. et al. (2009) allows the estimation of the default probabilities directly but, in contrast to common logistic regression models, it explicitly accounts for fractional data between 0 and 1. The large number of analyzed macroeconomic variables indicated the use of a model selection process, which helped to find the optimal multivariate model. The estimated models were sorted by the value of the adjusted R-squared and the value for the quasi-likelihood estimator, according to Boss, M. et al. (2009).

IV. Data and macroeconomic dynamics

With the aim of better understanding some of the links between credit risk and macroeconomic developments at an aggregate level, we built up correlation matrices between a large set of macroeconomic variables and corporate default rates. These matrices may provide a guideline of the cyclical co-movement between default rates and other macroeconomic variables, which can later be used as explanatory variables under a regression analysis framework.

1. Data

The corporate default rates were given by the Romanian National Commerce Office, in quarterly data, for each industry.

The correlation coefficients were calculated for five sectors: agriculture, industry, construction, services and for the overall economy. The data used for the analyses refer to the period comprised between 2002Q1 – 2008Q4. For each sector we used both the general and also the sector specific, seasonally adjusted (3) macroeconomic variables. Furthermore, where it was indicated the quarter - on - quarter change of the variables was taken into account in order to highlight their dynamic effects on the default rates.

Further on we focus on presenting the most significant correlation coefficients for each group of variables (4) regarding the overall economy, industry and services, since these two sectors represent the most important parts of the economy.

In the case of the **overall economy** within *the cyclical variables* the change of the nominal GDP, within the *households* the gross average wages, within the *corporate sector* the nominal GFCF, within the *external sector* the loans lent by foreigners, within *the price stability and interest rates* group the interest rates for existing loans denominated in Euro, within the *loans to private sector* the outstanding loans to households and finally within the *capital market* the value of the BET-C index stood out from the rest of the variables.

For the **industry** sector within the first group of variables the change of the nominal GDP, within the households the gross average wages, within the third group the nominal unit labor cost index, within the fourth group the FDI, within the fifth group the inflation rate, in the penultimate group the outstanding amount of bank loans lent to the industrial sector, and finally in the last group the value of the BET-C index was the most significant.

For the **services** sector within the cyclical variables the change of the nominal GDP, from the households the gross average wages, within the third group the ratio of nominal GFCF and GDP, within the fourth group the FDI, within the fifth group yet again the inflation rate, in the penultimate group the outstanding amount of bank loans lent to the services sector, and finally in the *capital market* the value of the BET-C index proved to be the most correlated with the default rates.

2. Results for the econometric analysis

(Table nr. 1) presents the estimated coefficients and p values for each analyzed sector. For the overall economy six variables were found to be significant in explaining the movements of the corporate default rates. No variables from the external sector were found to be significant. Even though the theory suggests a negative relationship between default rates and real GDP, the results are contrarian with this. This shouldn't be a surprise in the case of Romania, as during the analyzed period a highly overheated economic activity was observable. Bonfim, D. (2009) highlighted a similar relationship between credit overdue and real GDP growth. This relationship implies that a period of robust economic growth is usually followed by an increase in the number of defaulted firms with a lag of 1.5 to 2 years. The positive relationship between the lagged private real consumption and the dependent variable, similarly to the real GDP, could be explained with an overheat of the private consumption. Furthermore, both increased volatility of the BET-C index and interest rates have a positive effect on default rates which is in line with the theory. Other significant variables were the lags of real labor productivity index and loans to households.

In the model built for the industry sector four variables were found to be significant in explaining the movements of the industrial corporate default rates. Unfortunately, no variables from households, corporate sector and loans to private sector were found to be significant. A general observation for this model can be that from every group of variables the lagged ones became significant. Our results regarding the relationship between the industrial default rates and inflation rate doesn't prove to confirm the theory, as the relationship between the lag of inflation rate and default rate is negative. Among the group of cyclical variables the lagged values of industrial GVA were found to be significant in explaining the industrial corporate default rates. In contrary to the theory, which indicates a negative relationship, in our model the relationship between the two variables is positive. The explanation could be the same as for the overall economy. From the group of foreign sector the lagged total FDI proved to be significant and its relationship with the corporate default rates is positive. From the group of capital market the lagged volatility of BET-C is significant.

In columns 7 and 8 we can see which macroeconomic variables were significant from different categories for the construction sector. In the case of this model there weren't significant variables from the group of price stability and interest rates. As we can see, the nominal GDP has a negative coefficient, this can be interpreted as when the value of the nominal GDP is decreasing (in other words, there is a recession), the value of the default rates is increasing. It can be seen that there is a positive coefficient for the change of the average unit labor cost in the industrial sector lagged with five periods. This may suggest that the increase of the unit labor cost in the construction sector will increase in five periods the default rates.

For the agriculture sector we can see that there weren't significant variables from the group of price stability and interest rates and from loans to the private sector. The real labor productivity lagged with three periods has a negative coefficient, this meaning that if the real labor productivity decreases in the agricultural sector, it will increase in three periods the default rate. It is interesting too that if the net average wages increase they will increase in a half year the value of the default rates as well. Furthermore, the table shows that if the RON appreciates against the EURO the default rates will increase again.

In the case of the services sector, it can be seen that there weren't significant variables only from the external group. The highest impact on the default rates are caused by the changes in private real consumption and loans to households, both posting a negative relationship. For the services sector, the contemporaneous value of the volatility of the BET-C index was significant, indicating a positive relationship. Furthermore, the results show that interest rates for EURO denominated newly issued loans increase the probability of default in the next period.

V. Conclusions

Our aim with this research was to assess the relationship between the corporate default rates and the macroeconomic processes in the case of Romania for the period comprised between 2002Q1-2008Q4. In our analysis we employed a total number of 81 variables, which were combined differently for the following sectors: agriculture, industry, construction, services and the overall economy. Furthermore, these variables were ranked into seven groups: cyclical indicators, household indicators, corporate indicators, external sector indicators, price stability indicators and interest rates, loans to private sector and finally the capital market indicators.

Summarizing the results group-by-group can give a comprehensive overlook of the results obtained. Regarding the cyclical variables the nominal GDP and the real GDP proved to be significant in explaining the corporate default rates, not just for the overall economy, but for certain sectors, as well. On the other hand, in two cases (Industry and Services), sector specific cyclical indicators (GVA) showed high explanatory power regarding the dependent variable.

Eventually, for the household sector the private real consumption and the gross and net average wages, for the corporate sector the average labor productivity and labor cost, for the external sector the RON/EURO exchange rate, Total FDI and real Exports to GDP ratio, for price stability and interest rates the inflation rate and both EURO and RON interest rates, for loans to the private sector both the outstanding loans to households and firms, and finally for the capital market group the volatility of the BET-C index and the level of the index shows high explanatory power.

Overall, at least one variable from each group has a significant explanatory power regarding the evolution of the default rates. In some cases the sign of the variables was the opposite of what the economic theory would have suggested, but it has to be taken into account that Romania posted the picture of an overheated economy during the analyzed period. Another important conclusion is that many variables were significant through their lagged value, which indicates an even better supervision of the evolution of the specific variables. From all the variables, the volatility of the BET-C index proves to be the most important in predicting the evolution of the default rates, as it didn't proved to be significant only for the construction sector.

VI. Notes

1. From the 112 mentioned bank crises in the case of 27 the fiscal costs exceeded 10% of that specific country's GDP. Furthermore, in the case of 47 states the cumulative output remained with more than 10% under the potential level in the following years.

2. For example: average cash amount/debt amount, average financial coverage indicator, average liquidity, long term value of the firm, average firm size.

3. We were seeking to use only seasonally adjusted data, but in some cases only seasonally unadjusted data was available.

4. The used macroeconomic variables:

- Cyclical indicators: Nominal GDP sa., Nominal GDP sa. (%), Real GDP sa., Real GDP sa. (%), GVA sa. Industry, GVA sa. Industry (%), GVA sa. Construction, GVA sa. Construction (%), GVA sa. Agriculture, GVA sa. Agriculture (%), GVA sa. Services, GVA sa., Services (%).

- Household indicators: Private real consumption sa., Private real consumption sa., (%), PCR/GDP sa., Unemployment rate sa., Gross average wages, Gross average wages(%), Net average wages, Net average wages(%).

- Corporate indicators: Nominal GFCF sa., Nominal GFCF sa. (%), Real GFCF sa., Real GFCF sa. (%), GFCF/GDP sa. (nom.), GFCF/GDP sa. (Real), Average real labor productivity nsa., Avg. real labor productivity nsa. (%), Labor cost index (industry) sa., Labor cost index sa. (Industry) (%), Labor cost index sa. (Construction), Labor cost index sa. (Construction) (%), Labor cost index sa. (Services), Labor cost index sa. (Services) (%).

- External sector indicators: Gross nominal exports sa., Gross nominal exports sa. (%), Gross real exports sa., Gross real exports sa. (%), Real Exports/GDP sa., Total FDI nsa., Total FDI nsa. (%), FDI abroad nsa., FDI in Romania nsa., Foreign FDI nsa. (%), Total FDI/GDP sa., Total FDI/GDP nsa., Loans abroad nsa., Loans abroad nsa. (%), Loans to Romania nsa., Loans to Romania nsa. (%), RON/EUR nominal exch. rate nsa., RON/EUR nominal exch. rate nsa. (%), RON/EUR real exch. Rate index, German Real GDP sa., German Real GDP sa. (%), French Real GDP sa., French Real GDP sa. (%), Italian Real GDP sa., Italian Real GDP sa. (%).

- Price stability indicators and interest rates: Inflation rate, Interest rates for outstanding corporate loans (RON), Interest rates for newly issued corporate loans (RON), Interest rates for outstanding corporate loans (EUR), Interest rates for newly issued corporate loans (EUR).

- Loans to private sector: Outstanding loans to households nsa. (LtH), Outstanding loans to households nsa. (%), Outstanding loans to firms nsa. (LtF), Outstanding loans to firms nsa. (%), LtH/GDP, LtF/GDP, Outstanding loans to firms nsa. (Industry), Outstanding loans to firms nsa. (%) (Industry), Outstanding loans to firms nsa. (Construction), Outstanding loans to firms nsa. (%) (Construction), Outstanding loans to firms nsa. (Agriculture), Outstanding loans to firms nsa. (%) (Agriculture), Outstanding loans to firms nsa. (Services), Outstanding loans to firms nsa. (%) (Services).

- Capital market indicators: BET-C index value, BET-C volatility (yearly), BET-C yield.

Table 1: Results for the econometric analysis

	Overall economy		Industry		Construction		Agriculture		Services		
	Coefficient	Lag of variable	Coefficient	Lag of variable	Coefficient	Lag of variable	Coefficient	Lag of variable	Coefficient	Lag of variable	
	Constant	-18.0386*** (0.00001)	-	-18.6634*** (0.00529)	-	-6.88358** (0.03836)	-	-10.9335*** (0.00001)	-	-3.79269 (0.1463)	-
Cyclical variables	Nominal GDP sa. (%)					-8.29408** (0.01860)	-				
	Real GDP sa.	0.000193748*** (0.00011)	5					0.0000561656* * (0.02170)	3		
	GVA sa. industry			12.9567** (0.03777)	5						
	GVA sa. services									0.0110089** (0.0251)	4
Households	Private real consumption sa. (%)	5.80199** (0.01327)	4							-4.78416* (0.0595)	3
	Gross average wages					0.00319292*** (0.00256)	-				
	Net average wages(%)							2.51802** (0.04918)	2		
Corporate sector	Average real labor productivity nsa.	0.00572784*** (0.00029)	2					- 0.00774716*** (0.000097)	3	0.00752352*** (0.0001)	2
	Labor cost index sa. (construction)					2.81094* (0.08917)	5				
External sector	Real Exports/GDP sa.							6.68051*** (0.00483)	2		
	Total FDI nsa.			0.000160575** (0.01404)							
	RON/EUR nominal exch. rate nsa. (%)					-2.8321*** (0.00012)	1	-1.16338*** (0.00288)	-		
Price stability and interest rates	Inflation rate			-0.0649178*** (0.00298)	3						
	IR_O_RON	0.03809** (0.04545)	3								
	IR_N_EUR									0.170774* (0.0547)	1
Loans to the private sector	Outstanding loans to households nsa.	-0.754387* (0.06402)	4								
	Outstanding loans to households nsa. (%)									-1.5783*** (0.0021)	3
	Outstanding loans to firms nsa. (%)					6.49966** (0.01774)	2				
Capital market	BET-C index value					-0.0004205** (0.02558)	4				
	BET-C volatility (yearly)	1.13602** (0.03775)	3	1.42833* (0.06769)	3			1.93739*** (0.00057)	1	0.781511* (0.0720)	-
	Adjusted R-squared	0.930142		0.829331		0.863473		0.851494		0.910175	
	Log-likelihood	14.32392		1.197292		4.212762		14.56706		11.81074	

Source: authors' calculations

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ROMANIA'S ENERGY POTENTIAL OF RENEWABLE ENERGIES IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT

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The concept of "sustainable development" and the necessity for its realization has gone a long way in order to be unanimously accepted. Over time many authors have written about the problem regarding resources depletion, about the effects of pollution and their economic, ecological and social aspects of it. From the observation of the pollution phenomenon and its implications and until this problem has been acknowledged and accepted by a large number of people this problem has been extensively described by various authors be they economists, ecologists, biologists or psychologists and discussed at multiple conferences conducted in order to find a solution to this problem.

În ultimul secol, folosirea combustibilor fosili (cărbuni, gaz, petrol) a avut efecte dezastruoase, catastrofale asupra mediului înconjurător, mai mari decât orice activitate umană din istorie. In the last century, the use of fossil fuels (coal, gas, oil) has had disastrous effects, catastrophic even on the environment, greater than any human activity in history. Dintre aceste efecte putem enumera: încălzirea globală, apariția ploilor acide, subțierea stratului de ozon, etc. Among these effects we can enumerate: global warming, the emergence of acid rains, thinning of the ozone layer, etc. Prin urmare, utilizarea unor resurse alternative de energie devine iminentă pentru lumea de azi. In consequence, the use of alternative energy resources becomes imminent for the today world. Printre aceste resurse se numără soarele, vântul, apa geotermală, biomasa, apa, etc, care au capacitatea de a genera energie alternativă și anume: energia solară, energia eoliană, hidroenergia, energia valurilor, energia geotermală, bioenergia (biocombustibilii), biodieselul, etc. Among these resources we can include the sun, the wind, geothermal water, biomass, water, etc., which have the capacity to generate alternative energy namely solar energy, wind energy, hydro energy, wave energy, geothermal energy, bioenergy (biofuels), biodiesel, etc. care au menirea de a reduce poluarea termică, radioactivă, chimică oriunde pe glob. that have the as purpose the reduction of the thermal, radioactive and chemical pollution anywhere on the globe.

Sursele de energie regenerabile sunt în mare măsură indigene, nu se bazează pe disponibilitatea în viitor a surselor convenționale de energie, iar natural or predominant descentralizată face ca economia respectivă să fie mai puțin vulnerabilă în fața alimentării cu energii volatile. Renewable energy sources are largely indigenous; they are not based on the future availability of conventional sources of energy, and natural or predominantly decentralized makes that the respective economy to be less vulnerable in front of the supply with volatile energy. Prin urmare, ele constituie un element cheie al unui viitor energetic durabil. Therefore, they constitute a key element of a sustainable energy future.

This paper is meant to highlight the need for achieving a sustainable development both in terms of the problem that humanity faces which threatens the entire ecosystem and namely the environmental pollution as well as the depletion of the conventional resources that are highly polluting, highlighting the energy potential that renewable energy resources Romania has. This issue will be extensively discussed in the thesis entitled "The necessity and importance of sustainable development of Romania. Case study on the use of renewable energies for heating the population in the western part of Romania" which I intend to realize and support at The West University of Timisoara, Faculty of Economics and Business Administration, under the guidance of Professor Doctor Laura Cismaș.

Keywords: Sustainable development, solar energy, geothermal energy, biomass, wind energy

JEL: O13, Q01, Q27

Energy production technologies that use renewable resources are in different stages of development and marketing. The energies produced from renewable sources in 1998, the U.S., 55% came from hydro sources, 38% from biomass, including municipal solid waste, 5% from the geothermal source, 1% from solar power, 0.5% from wind power. Renewable energy resources are available all over the globe and can be found in abundance. Renewable energy technologies generate relatively little wastes or pollutants that contribute to acid rains, urban smog, or to could cause health problems and do not generate additional costs for environmental remediation or for waste disposal. Energy systems' owners of based on renewable resources should not be concerned about the potential global climate changes caused by excessive CO₂ and other polluting gases. Solar energy systems, aeolians and geothermal energy (most of them) do not generate CO₂ in the atmosphere, but the biomass absorbs CO₂ when it regenerates and that is why the entire generation, use and regeneration process of biomass leads to global emissions of CO₂ close zero. At present there are already several regenerative energy technologies, alternatives to burning fossil fuels for energy production, namely hydropower, aeolian, nuclear, geothermal, solar energy conversion technology, biomass, etc. (Bucharest: Alpopi, Florescu, 2009)

Solar Energy

The sun is one of billions of stars, but also the energy source of all living beings on the entire Earth. The solar energy that reaches the Earth in 40 minutes would be enough energy to meet the need for an entire year of all mankind. The man uses to such an extent fossil fuel based material - oil and coal - that the reserves will be exhausted in the second part of the next century. In the past, there was the belief that nuclear power is an alternative solution, but its degree of nuisance value is demonstrated by the Chernobyl catastrophe of 1986 and again in Japan. It was demonstrated that the energy sources that could replace fossil fuels, solar energy offers the greatest safety and accuracy.

Anatoine Becquel discovered the possibility of generating an electric current under the action of light in 1893. Since then, the electricity produced by the photovoltaic technology was asserted from an economically point of view and not only.

Worldwide sales of photovoltaic systems reached in 1998 at 150 MW, after a decade in which they have increased by 15-20% per year. (Bucharest: Motoc, 2009)

Arriving at a sales turnover of approximately 1 billion dollars, the photovoltaic industry has set new standards, has entered new markets and has demonstrated its economic viability.

It is estimated that the transition period of energetics will end around the years 2100-2200, when it will reach a stage of stable energy sector, by making unlimited energy source.

Solar energy represents the most impressive and reliable source of energy. Within 20 minutes, the sun provides the annual equivalent of energy consumption of mankind. On the Romanian territory, on a horizontal surface of 1 m², we can annually capture a lot of energy every between 900 and 1450 kWh dependent of course on the season. The average daily radiation can be 5 times more intense in summer time than in winter. But even in winter time, during a sunny day, we can capture 4-5 kWh/m²/day, solar radiation captured regardless of the surrounding temperature. Solar panels and system components from the Viessmann offer allow the exploitation of the solar power in various fields of applications: the preparing of the domestic hot water, pool water heating, heat input for heating buildings, heating for technology processes. The premises for using solar energy for preparing the domestic hot water are particularly advantageous due to the continuously changing evolution of the requirement during a calendar year. The overlap of

energy necessary for preparing SCR (the so called solar coverage rate) with the available solar energy is higher than in the case for heating buildings. A properly sized system can cover 50-65% of the annual necessary of SCR, in summer the coverage is most often 100%. Modern solar thermal systems can be incorporated without difficulties in the building facilities and have an estimated lifespan of over 20 years, making it an ideal complement to the modern heating technology. Starting from the data available was made a chart with the distribution of solar radiation on the territory of Romania. The chart contains the average annual flow distribution of the solar energy incidents on the horizontal surface of Romania.

Figure 1. Analysis of the solar radiation in Romania

	Temperatura aerului	Umiditate relativă	Radiație solară zilnică - orizontal	Presiunea atmosferică	Viteza vântului	Temperatura solului	Grade -zile lunare pt.încălzire	Grade -zile pentru răcire
	°C	%	kWh/m ² /zi	kPa	m/s	°C	°C-z	°C-z
Ian	-0,8	89,0%	1,25	99,3	2,8	-2,3	583	0
Feb	0,5	83,2%	2,12	99,1	2,9	-1,0	490	0
Mar	5,3	76,1%	3,17	99,0	3,1	4,4	394	0
Apr	11,0	72,8%	4,37	98,6	3,2	11,7	210	30
Mai	16,3	72,6%	5,35	98,7	2,7	17,9	53	195
Iun	18,7	75,1%	5,67	98,7	2,4	21,2	0	261
Iulie	21,1	72,0%	5,66	98,7	2,2	23,9	0	344
Aug	20,8	72,6%	5,05	98,8	2,0	23,8	0	335
Sept	16,2	77,6%	3,69	98,9	2,3	18,3	54	186
Oct	11,2	80,0%	2,35	99,2	2,2	11,7	211	37
Nov	4,2	85,5%	1,33	99,1	2,4	4,1	414	0
Dec	0,1	89,2%	0,98	99,3	2,7	-1,0	555	0
Annual	10,4	78,8%	3,42	99,0	2,6	11,1	2.963	1.388
Sursă	Sol	Sol	NASA	NASA	Sol	NASA	Sol	Sol
			Măsurat la	m	10	0		

Source: Data calculated by the author based on the program RetSreen

Regarding solar radiation, monthly deviation values on the territory of Romania reaches maximum values in June (1.49 kWh / m²/day) and minimum values in February (0.34 kWh / m²/day).

Thus, solar radiation for Romania represents approximately 330 million GWh per year (namely, the theoretical potential of solar energy). The technical surface that can be arranged is of approximately 30% of the available constructible area. So, the available constructible surface in Romania is of about 630 km², of which solar collectors could be installed on an area of 210 km². Each square meter of collector from Romania produces approximately 440 kWh of electricity or 1440 MJ of thermal energy per year. In order to replace the total amount of solar thermal energy required for heating in Romania (62,000 MJ) with solar thermal energy it is necessary a surface of 43km² of collectors. This represents 20% of the total usable area of 210 km². (Bucharest: Afloare, 2009)

At present in Romania there are 100.000m² (0.1 km²) of collectors installed, which represents 0.045% of the useable area.

Wind energy

Aeolian energy is a renewable source of energy generated by wind power. At the end of 2006, the global capacity of wind generators was of 73,904 MW, these producing a little more than 1 percent of the world electricity needs. Although considered a relatively minor source of electricity for most countries, aeolian energy production has increased almost five times between 1999 and 2006, reaching a point that, in some countries, the share of wind energy in the total of

energy consumption is significant: Denmark (23%), Spain (8%), Germany (6%). (Bucharest: Dobrescu, 2009)

Wind energy is widely used today, and new wind turbines are being built all over the world, aeolian energy is the energy source with the fastest growing rate in recent years. Most turbines generate more than 25% of the time, this percentage increasing in winter, when winds are stronger. It is believed that the global technical potential of aeolian energy can provide five times more energy than is consumed now. This level of exploitation would require 12.7% of Earth's surface (excluding oceans) to be covered by parks of turbines, assuming the fact that the land would be covered with 6 large wind turbines per square kilometer. These numbers do not take into account the improving turbine efficiency and that of the technical solutions used. (Bucharest: Poenaru, 2009)

It was considered necessary and appropriate the approach of some activities addressing the revaluation of Romania's wind potential, by using appropriate means and adequate tools (measuring devices, appropriate software, etc.) starting from the wind data measured at 22 stations belonging to the NMA.

The distribution on the territory of Romania of the average wind speed reveals that the main area with wind energy potential is that of mountain peaks where the wind speed can exceed 8 m/s.

The second area with aeolian energy potential that can be used in a cost-effectively manner is the Black Sea seaside, the Danube Delta and the north part of Dobrogea where the annual average wind speed is around 6 m/s. Unlike other areas of aeolian energy potential exploitation in the area is favored by less wind turbulence.

The third area with a considerable potential is the Bârlad Plateau where the average wind speed is about 4-5 m/s. Favorable wind speeds are also reported in other smaller areas in the western part of the country, in Banat and the western slopes of the Western Hills. In the capitalization strategy of the renewable energy sources, the wind potential is of 14,000 MW (installed capacity), which can provide a quantity of energy of about 23.000 GWh / year. These values represent an estimate of the theoretic potential and must be nuanced depending on technical and economic possibilities of exploitation.

Geothermal energy

The direct use of geothermal energy is one of the oldest, most versatile and also the most common forms of using energy. (Writings reveal that the use of geothermal energy dates back over 2000 years).

At present, studies of the domain show that Earth's geothermal potential is of approximately 13,000 ZJ per year, of which approximately 2000 ZJ could be used to produce electricity, with the help of geothermal power plants. If we could get to use only 0.25% of this potential, we wouldn't need coal, plutonium, oil and gas for generating electricity. Currently, we use only 1% of the world's electricity necessary which is covered by geothermal sources, so use 0.0025% of the full potential. (www.energeia.ro)

The usage of the extracted geothermal energy used for heating is of 37%, 30% for agriculture (greenhouses), 23% in industrial processes, 7% for other purposes. From a number of the 14 geothermal wells drilled between 1995- 2000 to depths of 1500-3000 m, only two wells were unproductive, recording an 86% rate of success.

Five wells that are available have temperatures above 100° C. The national exploitable reserve is about 167 thousand toes / year low enthalpy resources, of which currently builds about 30.000 toes/ per year. The total installed capacity in Romania in the west and northwest part is 320 MWh (for a reference temperature of 300° C).

Biomass

Another way of producing electricity and heating domestic water is to use biomass. Biomass is a scientific term for living materials (any organic material derived from plants as a result of the photosynthesis process). The same term is used for products derived from living organisms (wood, harvested plants, parts of plants and other plant residues) and aquatic plants and animal wastes. According to the Directive RER-electricity, "biomass" is the biodegradable fraction of products, wastes and residues from agriculture (including animal and vegetable substances), forestry and woodworking, as well as biodegradable fractions of industrial and municipal wastes. Romania has a high biomass energy potential, which represents almost 19% of total primary resources energy consumption in 2000. Romania's potential in the production of green energy is of 65% biomass, 17% aeolian energy, 12% solar energy, 4% micro hydro plants and 2% voltaic plus geothermal 12.

Romania has important renewable resources distributed in different parts of the country but they are not exploited to their full capacity, with the exception of the hydropower resources.

On the other hand the policy regarding energy is mainly a national issue, because energy is considered a strategic asset, therefore the investments in this sector are much needed. In addition the EU's main instrument in fighting the weather changes is constituted by the climate policy, because this sector produces 80% of the total emissions of the greenhouse gases.

To these it can be added that the Romanian energy sector the majority of the existing facilities are outdated. Given this situation the investments in this large area were built around the 80's and the maximum duration of operation guaranteed of the electric power stations and the thermal ones is of 30 years. If we add the technical progress and the European targets for reducing pollution, we strongly believe that the use of renewable resources represent a necessity and at the same time a solution for many national and European or even global problems.

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IS READY ROMANIA FOR EURO ADOPTION? FROM STRUCTURAL CONVERGENCE TO BUSINESS CYCLE SYNCHRONIZATION

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The objective of this study is to identify gaps between economic and commercial structures between Romania and the euro area and to explain whether the results obtained justify recently decision to delay euro adoption beyond 2015. According to theory of optimum currency areas, the existence of similar economic structures, increasing trade integration and synchronization of business cycles with monetary union will provide greater symmetry of shocks between Romania and the euro area. If the shocks are more symmetrical, then common monetary policy of the European Central Bank will act as a tool to neutralize the shocks in the case of Romania, and the euro adoption would have fewer adverse effects. To meet the research objective, we have structured this paper into three parts. In the first part we referred to the importance of the proposed theme in the economic literature. In the second part, we used several statistical methods to identify how divergent is Romania relative to the euro area economies. The results obtained show increasing divergence between economic structures until 2009 year using the NACE 6 methodology. In fact, Romania has the most divergent structure in EU-27 countries, being characterized by lowest contribution of services to GDP. However, structural differences do not constitute an obstacle to euro adoption, as long as Romania becomes more commercially integrated with other European countries. Thus, Romania is the seventh economy in terms of trade with the EU-27 (73.3% of exports and 74.3% of imports), and the degree of convergence between the structure of exports and imports have increased significantly compared with 2000 year. In the third part, we estimated the degree of synchronization of business cycles between Romania and the euro area, based on Hodrick-Prescott filter. Results showed an increasing correlation of business cycles as a result of increasing industrial activity and export synchronization.

Keywords: euro area, sectoral divergence, business cycle synchronization, Krugman index, Hodrick-Prescott filter

Jel codes: E32, F15

Introduction

For economies that decide to be part of a Monetary Union, the most important cost is giving up monetary policy and exchange rate for its own internal objectives. This cost can be illustrated from the situation of a country that is affected by a restrictive economic shock (for example, increasing internal production costs). If this country not adopted a common currency, would be able to depreciate the currency in order to enhance competitiveness and neutralization of shock would be achieved more quickly. Therefore, the economy will be affected by economic shocks which it will offset more difficult and the cost of adopting a single currency will be higher. According to the theory of optimum currency areas (Mundell, 1961), the single monetary policy

within the monetary union can substitute independent monetary policy if there are a similar shocks to the other member countries of the union. Otherwise, the single monetary policy of the European Central Bank will generate more asymmetric shocks in euro area. The risk of shocks asymmetry increases especially in economies with structural divergence relative to euro area country. Even in the absence of economic convergence, it can be advantageous to join a monetary union, if that economy has other mechanisms which substitute independent monetary policy and offset the consequences of an asymmetrical economic shock. The functioning of these mechanisms is ensured usually by the existence of labour market flexibility. As well, enhancing of the trade linkages with monetary union countries can counterbalance to some extent the lack of structural convergence. Thus, commercial integration is one of the main mechanisms for more synchronization business cycles. According to Frankel and Rose (1998), the membership of the monetary union lead to an increasing correlation of business cycles, following more trade linkages. The more the commercial and financial relationships between the economic agents which belong to two economies are stronger, the more their impulse to adopt a mutual currency is higher. These economists argue that divergent economies with the euro area countries could adopt the euro single currency without much loss. This is called the endogenous optimum currency area, which means that a country will better meet the criteria for euro adoption ex post than ex ante. However, Krugman (1993) endorsed that the increase of the commercial relationships between two economies did not also generate symmetric shocks between them, as each economy will specialize in producing the goods which it can make more efficiently, that weakens the synchronization degree between the economies members. Also, entering the monetary union strengthens the correlation of business cycles only if the increase in foreign trade integration boosts inter-industry and not intra-industry foreign trade. This assumption is called the specializing hypothesis within the theory of the optimum currency area.

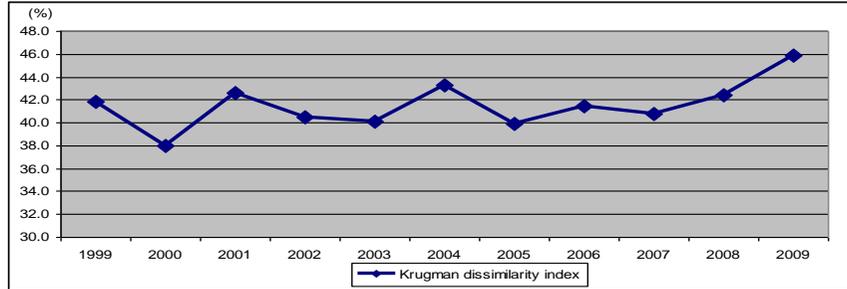
Sectoral divergence between Romania and euro area

If an economy has a sectoral structure (as measured by gross value added weights) less different than to euro area, then economic shocks will be more symmetrical and the costs of giving up the national currency will fall. The structure of the Romanian economy is very different from the EU members, and this situation will persist for a long time. Romania has a real urban distribution leads to a relatively low share of services in GDP achievement. Thus, despite high rates of economic growth by 2008, the share of services in GDP has not exceeded 50%, under a European average of over 70% of GDP. To highlight the differences between the sectoral structures of Romania and the euro area we used the dissimilarity index, proposed by Krugman, showing the distance relative between the economic structures of the Romania and the euro area.

$$\text{Krugman dissimilarity index}_{\text{RO/EA}} = \sum_{k=1}^n \text{abs}(s_{k,RO} - s_{k,EA}) \quad (1)$$

Where, s_k represents the share of sector k in total value added in Romania and euro area. The index takes value between 0 (perfect similarity) and 1 (maximum dissimilarity). The higher the index, the less similar are the economic structures of the Romania and euro area. In this paper, we have analyzed the degree of divergence between the economic structures of Romania and the euro area with 17 countries based on NACE 6 classification (Fig.no.1).

Figure 1. Sectoral divergence between Romania and euro area (NACE 6)



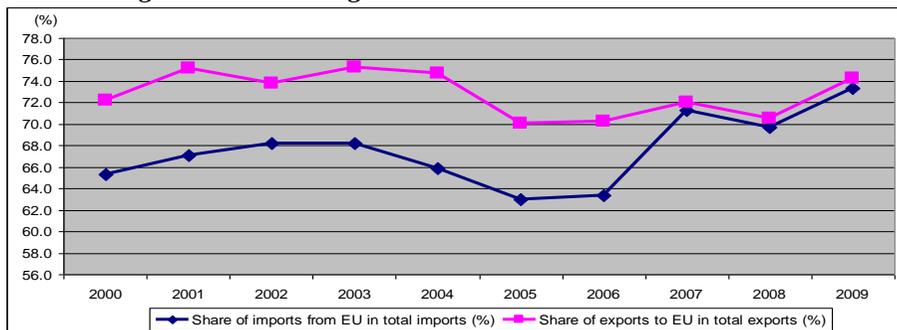
Data source: Eurostat (2011); our calculation

Romania has the most different structure of the economy compared with the euro area, following a relatively higher proportion of agriculture (over 4 times higher in 2009 year), industry (by about 10 percentage points over the reference in 2009), transport and trade (by about 4 percentage points higher in 2009), constructions (11% of GDP in 2009, compared with 6.3% in the euro area) and a lower share of the services sector (with 24 percentage points in 2009). The existence of a relatively higher proportion of industrial activity ensures a more rapid convergence process of the trade, since most of Romania's trade is made with industrial products. The contribution of agriculture to total gross value added decreased by half in 2009 compared with the year 1999, but this trend has not been accompanied by significant increase of labour productivity or exports. The boom of GDP in the period 2004-2008 was reflected at sectoral level by increase of the construction and trade shares, both leading to larger sectoral gap compared to euro area. The biggest differences between Romania and the euro area are in financial services and other services (including the public, education, health, etc.), Romania recording the lowest share of services in the EU-27.

Identifying the degree of trade integration

More than 85% of trade between Romania and the countries of the euro area is made with industrial goods, so that only the shocks which affect the industry in the euro area will transmit symmetrical/asymmetrical in the national economy. Consequently there will be a close correlation between developments in exports and industrial activity in the case of the two economies. Romania compensates the structural gaps of economy with a high commercial integration with the rest of the EU-27 countries, having the seventh share of imports and of exports with the EU-27. Accession to the European Union has generated increasing the share of exports at the level of 2004, while the share of imports increased by around 10 percentage points to 73,3% of the total in 2009, particularly as a result of the customs duties abolition and of poor competitiveness of agricultural and industrial goods produced (Fig.no.2).

Figure 2. Trade integration between Romania and EU-27



Data source: Eurostat (2011)

In the light of the adoption of the single currency becomes more important commercial integration with the euro area countries. In 2010, approximately 56% of exports and 53% of the imports were with these economies, but these values are declining compared to 2004, where approximately 60% of foreign trade was made with euro area countries. In 2010, five of the top ten countries of exports/imports destination were from the euro area (46.5% of total exports, i.e. 42% of total imports), demonstrating a high trade integration with the economies forming the core of the euro area. However, compared with 2004, the share of these economies in total exports was reduced by about 4.5 percentage points, due to the reduction of exports to Italy, with about 7.3% in 2010 (Table no.1).

Table1. The most important trading partners of Romania within the euro area

2004		2007		2010	
Share in total exports	Share in total imports	Share in total exports	Share in total imports	Share in total exports	Share in total imports
Italy – 21.2%	Italy – 17.2%	Italy – 17.1%	Germany – 17.2%	Germany – 18,3%	Germany – 16,8%
Germany – 15%	Germany – 14.9%	Germany – 16.9%	Italy – 12,7%	Italy – 13,9%	Italy – 11,6%
France – 8,5%	France – 7,1%	France – 7,7%	France – 6,3%	France – 8,4%	France – 6%
Netherlands – 3,2%	Austria – 3,5%	Austria – 2,6%	Austria – 4,8%	Spain – 3,1%	Austria – 4,1%
Austria – 3,1%		Spain – 2,3%	Netherlands – 3,6%	Netherlands – 2,8%	Netherlands – 3,5%
Total		Total		Total	Total
51%	42.7%	46.6%	44.6%	46.5%	42%

Data source: Department of External Trade, Romania

Given that about half of Romania's trade with EU-27 is done with the core of the euro area (Germany, France and Italy), then their macroeconomic developments will decisively influence the industrial activity and exports of the Romanian economy. Economic shocks that will affect these economies will be transmitted through trade in the Romanian economy and these will become more symmetrical. To show how sectoral and trade integration divergence between Romania and the euro area influence the nature of shocks affecting the two economies, we proceeded to determining the degree of synchronization of business cycles.

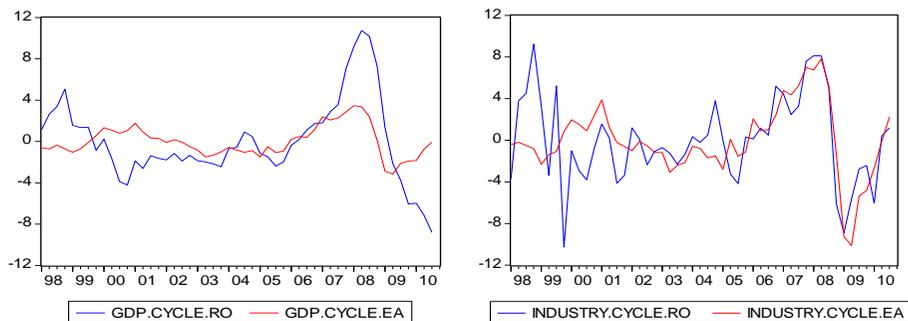
How correlated are business cycles between Romania and the euro area?

The economic literature does not use a single method to determine the business cycle and the correlation between them. In this study we have used the Hodrick-Prescott filter that has a number of limitations affecting the accuracy of final results. It uses an arbitrary choice of the smoothing parameter, being characterized by the lack of reliability of estimates at the beginning and the end of the sample. To determine the correlation between cyclical developments in the two economies have used the data series of GDP and of the gross added value of industrial activity, both being expressed in constant prices in the form of indices with fixed-base 2000 year. The variables used were seasonally adjusted using the procedure Tramo-Seats from econometric software Eviews 6, each including 51 quarterly observations from 1998:1-2010:3, data source being Eurostat. We determined the business cycle based on both real GDP and industrial activity, as in Fig.no.3. Romania has recorded larger cyclical fluctuations than the euro area, as in the case of emerging countries, evidence of high sensitivity of the national economy to internal and external capital flows. In terms of business cycle determined by the evolution of GDP (the first graphic of Fig.no.3), Romania produced below potential over the period 2000-2005, the economic evolution being less favorable relative to the euro area. Since 2006 there has been an overheating of the Romanian economy, which was reflected in inflationary gap increased from 2% to 11% in just five quarters. Part of this evolution was explained by the increase in industrial

activity (the second graph of figure below), which had also decreased the overall economy since Q2 2008.

Industrial activity has returned in the two economies at its potential level as a result of expansionist programs promoted in the euro area and of external demand increase. However, unlike the euro zone, the recovery of the Romanian industry has not generated improvement of the whole economy because were promoted a series of budgetary austerity measures have led to reductions in consumption and investment.

Figure 3. The business cycles in Romania and euro area



Source: Our estimations in Eviews 6

We have used Pearson correlation coefficient statistic to determine how much are synchronized the business cycles of the Romania and euro area. In the analysis we included Germany, because is the most important economy of the euro area (produces over 25% of euro area GDP) and is the main trading partner of Romanian economy. We found the degree of correlation between business cycles both for the whole period 1998-2010 Q3, but also for several sub-periods that correspond to the beginning of the period of economic expansion in Romania (2004 Q1) and of the first quarter of declining industrial production in Romania and in euro area (2008 Q2). The results obtained indicate that Romania has a similar correlation with Germany and with the euro area, because between these there is almost a perfect synchronization of business cycles. Romania recorded a higher correlation between business cycles based on industry than on the basis of GDP (except for sub-period (2004 Q1 -2008 Q2), as a result of trade interdependence with industrial goods. In fact, the economic crisis has spread through external sector, but this has ensured the return of Romanian industry at levels registered in 2007-2008. The maximum degree of correlation between business cycles (based on GDP) was recorded before the economic crisis (2004 Q1-2008Q2 sub-period), while between 1998 Q1-2003 Q4 Romania has characterized by a negative correlation with euro area /Germany (Table no.2). Return of Romanian industry since Q3 2009, but not recovery of the whole economy are reflected in the increasing correlation of business cycles based on industrial production (and not GDP) between 2004Q1-2010Q3 compared with 2004Q1-2008Q2.

Table 2. The correlation of business cycles between Romania and euro area/Germany

	Business cycles correlation (GDP)		Business cycles correlation (industry)	
	Romania and euro area	Romania and Germany	Romania and euro area	Romania and Germany
1998:1-2010:3	0.55	0.56	0.60	0.59
1998:1-2003:4	-0.40	-0.49	-0.11	-0.09
2004:1-2008:2	0.88	0.87	0.80	0.79
2004:1-2010:3	0.72	0.78	0.85	0.84

Source: Our estimations in Eviews 6.

Conclusions

The economic crisis was a test to euro adoption by Romania. Negative external shock has been transmitted in Romania through trade linkages and through foreign economic agents and monetary policy was not effective in neutralizing the impact of this shock. In other words, the economy could not benefit from an adjustment tool, like in situation in which it was part of monetary union. Romania has passed the test of the crisis (although he was the last of the new EU member states), but not by identifying other internal mechanisms for adjusting negative shock, but benefiting from an external channel adjustment (recovery of trading partner economies). However, this solution will not be available in all cases in which the Romanian economy will decrease. Therefore, the lack of internal solutions to neutralize the economic shock will extend their influence and will lead to higher costs of the euro adoption.

Note

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EUROPEAN AUSTERITY WITHOUT GROWTH? EUROPEAN GROWTH WITHOUT EUROPEAN DEMOCRACY? HOW EUROPEAN CITIZENS CAN REVIVE THE EUROPEAN PROJECT AND DEFEAT EUROSCEPTICISM

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The European project is facing a crisis. Citizens no longer understand what the EU is about. Young people and the new ruling class have forgotten the clear message of the European project launched just after the Second World War “No wars ever again among Europeans.” The founding fathers of the European Union are mentioned in history textbooks, but today Europe is felt as an irritating bureaucracy. In Europe, peace and economic stability are considered as a natural state, a gift from above. Why keep a useless EU alive?

The state of the European Union is swiftly degenerating. In almost all the member states, the anti-European forces are gaining ground. Populism is not a new ideology and is not necessarily European: let’s recall Peronism. In today’s Europe populism is the new manifestation of nationalism. In Italy the Lega Nord is in Berlusconi’s eurosceptic government. In France, the National Front is endangering UMP’s hegemony. In Belgium the rows between the Flemish and the Walloons threatens the state’s unity. In the Netherlands, Hungary, the Czech Republic, Austria and Finland, populist forces are either in the government or strongly influencing the government.

National-populism is different from the nationalism of the past. De Gaulle’s nationalism was an ideology founded on the “grandeur” of France’s history and on a certain idea of Europe, which was “l’Europe de patrie”, a kind of European unity accepting French leadership in world politics. Today national-populism is a form of micro-nationalism: it opposes the European project but without having a serious alternative. This is why populism is dangerous. Its real goal is not only the breaking down of the European Union but also the disintegration of the old nation states into micro-ethnic states, as what happened in former Yugoslavia.

* * *

European populism and euroscepticism are two faces of the same coin. Democratic pro-European parties cannot fight them successfully in the nation-states. Both are the product of the crisis of the European project. The crisis started at the end of the Cold War, because the European Union leaders failed to exploit the favourable occasion of the enlargement to complete the project of the founding fathers. We can recall a certain number of lost occasions. The Maastricht Treaty was an unsatisfactory compromise: a Monetary Union without an Economic Union and Political Union. The European Convention worked out a Treaty-Constitution without establishing a European government. Moreover it did not change the unanimity rule for the ratification process, even though the principle of the double majority of citizens and states was granted in the constitutional draft-project. So, when the French and the Dutch rejected the Treaty-Constitution with a referendum, nobody noticed that a “minority” of citizens voted against it, while a “majority” had already approved the Treaty-Constitution. Now we have the Lisbon Treaty, which is considered a substitute of the Treaty-Constitution. Meanwhile the political atmosphere has changed. The old generation of people who experienced the tragedy of the world war is no longer involved. The new ruling class is grappling with new problems: international terrorism, the difficulties concerning the enlargement, immigration, the challenges of global economy, the increasingly difficult Atlantic partnership, the inability of Europe to spur growth.

In this new political environment the European Union is considered as a set of institutions useful for national governments, but not for a long-term project which is worth achieving, the “first assises de la Fédération Européenne” as was stated in the Schuman Declaration. Moreover, the relative power between France and Germany – the old engine of European unity – has changed

dramatically. After the War, France was the only European state capable of taking the initiative to unite Europe and it did. Now, after its national unification, Germany is looking for a new world status, both from the economic and the political point of view, as its ambition to enter the UN Security Council shows. So, slowly but resolutely, the Franco-German engine of European integration has turned into a kind of *directoire*. Since the Lisbon Treaty did not solve the problem of the European government, France and Germany started to talk about the need for “European governance”, which according to Mr. Sarkozy and Mrs Merkel should be nothing but the European Council, where the main decisions concerning foreign policy and finances, are taken unanimously. The outcome of this project is that, when the financial crisis burst, the Franco-German *directoire* took the leadership, imposing intergovernmental solutions, outside the traditional “institutional triangle”: the European Parliament, the Council of Ministers and the Commission. According to the Treaty, these institutions must decide on the basis of the communitarian method: the European Parliament and the Council of Ministers co-legislate and the Commission executes (in such a case the Commission becomes the “government” of the Union). On the contrary, the *directoire* excludes the European Parliament almost completely from the decision-making process.

As far as the financial crisis is concerned, without entering into a pedantic account of the decisions taken, suffice it to say that the problem was thus conceived: how much should the virtuous states of the Union pay in order to avoid the failure of the vicious states, the so-called PIGS? In order to do that, the European Stability Mechanism (ESM) was established, thanks to a change in the Treaty, so that the finances put in the ESM will always be under the control of national governments. This mechanism, together with the European semester, should increase the respect of the rules of national fiscal policies and guarantee the necessary austerity. It is an improvement of the old Growth and Stability Pact (GSP). But it will also perpetuate conflicts among national governments. On the contrary, a solution in line with the European spirit, not requiring a change in the Treaty, was easily available: it would have sufficed to agree to an increase in the European budget (as much as the ESM) providing new “own resources” to the European Union. The Monetary Union is the institution which provides a crucial European public good: monetary stability. If the Monetary Union is in danger, because of mismanagement in some state, this state should comply with the rules agreed upon, but all European citizens, whatever their nationality, should contribute to rescue of the Monetary Union.

The *directoire* scheme is not only inefficient, since it produces weak and provisional solutions to European problems, but also unstable, because when the economy is concerned, Germany takes the leadership, but when the problem requires a military engagement – as has happened with Qaddafi’s Libya – France takes the leadership; it is undemocratic, because it discriminates small countries and excludes the European Parliament (therefore the citizens) from the decision making process: can European citizens or the European Parliament dismiss the *directoire*?; it is harmful, because it would feed the wrong belief that the EU is only an additional instrument for national governments and that greater political unity is not necessary. To conclude, the intergovernmental method and the will to establish a European *directoire* are the true causes of euroscepticism, the revival of nationalism and the rise of populist movements in Europe.

* * *

In spite of the EU crisis, the European project is not dead. The present ruling class is unable to have a “vision” for the future of the European Union, but luckily the original institutions created by Europe’s fathers are wiser. Jean Monnet said: “the life of the Institutions is longer than the life of men, and for this reason institutions can, if they are well planned, accumulate and hand down wisdom to several generations.” This is the case of the European Parliament, an institution already conceived with the ECSC. After its election by universal suffrage, in 1979, the European Parliament has become the only legitimate institution representing the will of European citizens. In fact, since 1979, on the occasion of every change in the Treaty, the European Parliament was

able to increase its power. Now, with the Lisbon Treaty, it also has the constitutional power to start the reform of the Treaty. Some recent events show that the European Parliament feels awkward with the increasing lordliness of national governments. It is worth recalling three recent initiatives.

A group of 97 MEPs, members of the EPP, the Greens, the ALDE, and the S&D, has created the “Spinelli Group” – a network open to contributions of civil society – on the basis of a “Manifesto” which states: “Unfortunately, whereas the formidable challenges of a manifold crisis demand common responses, drawn at least at European level, too many politicians fall tempted to believing in national salvation only. In time of interdependence and a globalised world, clinging to national sovereignties and intergovernmentalism is not only warfare against the European spirit; it is but an addiction to political impotence. ... Nationalism is an ideology of the past. Our goal is a federal and post-national Europe, a Europe of the citizens.” For the time being, the Spinelli Group has organised public debates on the occasion of European Council, proposing a “Shadow Council” as an alternative to the national governments point of view. Of course, its aim is to gain a wider consensus in the European Parliament and in the public opinion in order to relaunch the institutional reform of the European Union.

The second initiative is the reform of the electoral system for the European Parliament. The Constitutional Commission of the EP has already approved, on April 2011, the proposal of the federalist MEP Andrew Duff, to set aside 25 seats for candidates elected through pan-European lists presented by European political parties, starting with the next elections in 2014. This transnational constituency will oblige European parties to present prominent political personalities, well known all over Europe, and with the chance of becoming President of the European Commission, if he/she is elected and if his/her party or the coalition of parties obtain the majority of voters. Every elector will have two votes: one for the national list and one for the transnational list. According to Duff: “MEPs from all the main party groups have reached a strong consensus on the need to reform Parliament. Under the proposed scheme, the next European elections in 2014 will take on a genuine European dimension. The opportunity of using a second vote for transnational MEPs should galvanise voters who have come to recognise that national political parties no longer work to sustain European integration in an efficient or democratic way.”

The third initiative was taken by three MEPs – Jutta Haug (S&D), Alain Lamassoure (EPP) and Guy Verhofstadt (ALDE) – who launched the proposal “Europe for Growth. For a Radical Change in Financing the EU”. Lamassoure is also the President of the Budget Commission of the EP: this proposal should be considered as the necessary complement to the austerity plan of the Council. If the European economy is not able to grow, to create jobs and to compete in the global market, the austerity plan is certainly doomed to failure. As we have already noticed, at Maastricht the decision to create an Economic and Monetary Union (EMU) was made, but the reality is that only the M leg of the plan was built, the E leg was forgotten. Today we have one European currency for 17 member states, but 17 national financial policies. This asymmetric economic governance does not work, as the crisis of the sovereign debts has shown. The problem is: is an autonomous financial policy for the EU possible? In fact, the EU has its own budget, but its size is only of 1% of GDP and a great part of it is devoted to agricultural policy; moreover it is practically financed by national resources only. The result is that each state requires the “net return” from its payments to the EU, so that at the end of worn out debates among national ministers the European budget becomes an external support to national budgets. The crucial role of the European budget, which should be to provide European public goods, which are not feasible at a national level, is completely denied.

“Europe for Growth” proposes two ambitious goals. The first is to end the system of national contributions, going back to the original idea of genuine European resources. The present budget of the EU can be totally financed by 1% of VAT, a carbon tax and, if necessary, by a financial

transaction tax. The second goal is a public investment plan, financed entirely by Project Bonds issued by the EIB. The main reason for such a plan is that “in the last three decades the public investment ratio in the eurozone has declined by more than 1% of GDP. This trend has contributed significantly to making the eurozone a low-growth area. This trend should be reversed. This can be done by a new programme of project bond issues aimed at raising the public investment ratio in the eurozone by 1% of GDP. Since the eurozone GDP amounts to approximately €10 trillion, this means that the new yearly Euro project bond issue of €100 billion aimed at financing public investments should be undertaken.” One should notice that the size of this plan is three times the Delors Plan of 1993.

The three initiatives are crucial to change the outcome and the meaning of the next European elections in 2014. Since 1979 the turnout has continuously declined from one election to the other. The explanation is simple. Since there is not a clear European policy at stake and there is not a European government the citizens can choose, the European elections turn out to be a summation of national elections. The European Parliament is not considered a crucial institution for the future of the European citizens and, in effect, the European Council, i.e. national governments, takes the main decisions. But, if the citizens can choose, in the European constituency, a European leader who can also become President of the European Commission, and if the main European parties include a Plan for European growth, more public investments and more jobs in their programme, citizens could find a real interest in participating in the European elections. In such a case the newly elected European Parliament must keep the commitment made before the electors. A growth policy cannot be carried out without the active support of the citizens, civil society organisations, political parties and trade unions; in short, a European growth policy is impossible without European democracy.

* * *

The participation of citizens in the European project cannot be limited to European elections. In a democratic community citizens debate public issues daily and either support or blame their political parties and their government. But do a European public space and a European people exist? The fact that eurosceptics were of the opinion that a European public space and a European *demos* did not exist significantly affected the debate on the European Constitution. Now, the Lisbon Treaty offers the opportunity to overcome that criticism. One million citizens can take the initiative in inviting the European Commission “to submit any appropriate proposal on matters where citizens consider that a legal act of the Union is required.” Of course, also eurosceptic forces can exploit the European Citizens’ Initiative (ECI). Indeed every ECI will spur useful public debates in the EU and provoke a reply from political parties and European institutions. In any case, the ECI can be exploited for fostering European political unity. For instance, an ECI could invite the Commission to provide all the legal acts necessary to implement the proposal of “Europe for Growth.” This initiative can be supported not only by the main European parties, but also by trade unions, European business associations, local governments, civil society organisations and countless citizens.

In 1989, many citizens gathered together in the squares of Eastern European countries to claim democratic regimes. Today, Arabian citizens are protesting and fighting against their dictators. Every people should find their way and their means to affirm or to put forward more democracy. In the EU there is no dictator to be fought. The enemy of European democracy is intergovernmentalism with its ideological base: euroscepticism. If the proposed ECI is successful, eurosceptics will stop talking about the non-existence of a European *demos* and the way for transforming the EU into a true supranational democracy will be open.

TRENDS IN ROMANIAN TOURISM

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Tourism is an industry of the future, having the potential to provide significant revenues, and an industry of „beauty”, because it will protect, preserve and contribute to arranging the environment affected by other human activities. This is why it is very important to know the evolution of this underdeveloped field in our country. This paper is intended as a study on current trends in Romanian tourism without any claim of being an exhaustive research on the industry, describing the main indices of tourist traffic and their influence on Romanian tourism. Nowadays, we witness three main trends in Romanian tourism: sustainability, ecotourism and the increasing presence of cultural tourism. Ecotourism, as a form of tourism, has emerged from people's need to withdraw in nature, to visit and learn about the natural areas which have or have not a national or international protection status. Cultural tourism appears as a type of tourism clearly differentiated from other forms or types of tourism, particularly through motivation. It can be defined as a form of tourist mobility whose primary goal is broadening the horizon of knowledge by uncovering its architectural and artistic heritage and the areas in which it originates. Sustainability for tourism, as for other industries, has three independent aspects: economic, socio-cultural and environmental. Sustainability implies permanence, which means that sustainable tourism requires the optimal use of resources, minimizing the negative economic, socio-cultural and ecological impact, maximizing the benefits upon local communities, national economies and conservation of nature. Regarding statistical data, in what quantity is concerned, there is an increase in Romanian tourism, but in what quality is concerned there is a setback for tourism in the last years. This aspect should make public authorities take concern in improving the infrastructure and the quality of the touristical activity and in diversifying entertainment.

Keywords: sustainability, cultural tourism, ecotourism, trends, tourist traffic.

JEL:Code: O11

As the human society has developed, tourism as an industry grew on a very large scale, influencing today the contemporary world both on a geographical as well as on a socio-cultural and economic level.

Tourism as a social-economic activity that has gained a rightful place in all human activities, feels at the utmost the economic imbalances and social convulsions. Not incidentally, today, the largest tourism and tourist-sender and tourist-receiver countries are the overdeveloped ones, while countries with actual developing potential in tourism, where the economy is in transition, face difficult challenges both in terms of their own tourism and international tourism.

Romania's tourism potential is extremely high, but unfortunately not properly capitalized. Unlike neighboring countries, Romania has a high tourism potential both in the mountain areas as well as in the coastal areas. Thus, the seaside tourist resorts include Mamaia, Eforie Nord, Eforie Sud, Costinesti, Jupiter, Saturn, Mangalia, Vama Veche, Venus, and in the mountainous areas - especially in the Meridional Carpathians, but not only, there are true touristical treasures.

Travel and Tourism in Romania had a different journey for the past 10 years, expressed in international arrivals. Beside a slight increase in 1999 – 4,5 million tourists - arrivals have had a continuous decline until 2001 - 2002, when 1.5 million tourists arrived. This was also due to the global economic downturn after the events of September 2001, which negatively affected the entire world tourism. After this period there was an impressive growth in 2003, with more than 16%, reaching in 2004 6.7 million tourists, growth that was sustained also in 2005, the number of tourists increasing by 500 thousand over the previous year. The vast majority of international arrivals in Romania were from 2000, about 95% of visitors coming from the mainland. Of these, 75% - according to data from 2004 - are arrivals from five countries: Ukraine, Moldavia, Bulgaria, Hungary, Serbia and Montenegro. In 2006 the number of tourist arrivals was 6 million while in 2008 it rose to 8.8 million tourists.

This paper is intended as a study on current trends in Romanian tourism without any claim of being an exhaustive research on the industry. Tourism will become an industry of the future and will remain, certainly, an "industry of beauty" because it will protect, preserve and, at the same time, contribute to arranging the environment, affected by other human activities.

Sustainability, for tourism as well as for other industries, has 3 independent aspects: economic, socio-cultural and environmental. Sustainable development implies permanency, which means that sustainable tourism refers to the optimal use of resources (including biological diversity), minimization of the negative economic, socio-cultural and environmental impact, maximizing the benefits upon local communities, national economies and environment conservation. As a natural consequence, sustainability refers also to the necessary managerial structures for fulfilling these objectives. The purpose of sustainable tourism has to be subordinated to the national and regional economic and social development plans. The actions may cover economic purposes (increase of income, diversifying and integration of the activities, development control, enhancement and zoning), social purposes (decreasing the poverty level and the inequity of income distribution, the protection of the original socio-cultural heritage, the participation and implication of local communities), or ecological purposes (the protection of the functions of ecotourism, the conservation and sustainable use of biodiversity). Some specialists prefer to talk about the sustainable development of tourism, sooner than about a sustainable tourism, the first concept referring to all the aspects of development, while the other concept refers to some aspects and parts of tourism – such as long-distance air transportation that can simply not be sustainable, in what current technologies are concerned, even with the use of the best methods.

Touristic politic and plan implementation represents a big responsibility of the government and of the private sector. The private sector answers for establishing a tactic, planning and researching, forming the basic infrastructure, developing some touristic attractions, establishing and administrating the norms of offering services and facilities, establishing the means of administration and valuing the territory and of protection of the environment, establishing the standards for preparing and perfecting the field of tourism, sustaining health and public security.

The private sector answers for the development of housing services and operations of touristic agencies, the activity of commercial organizations with touristic characteristics, and it is based on infrastructure, development of certain touristic attractions and their promotion through specific marketing activities. The political devotion for touristic development in a planed and sustainable way is essential. Also, the nongovernmental organizations are involved in more and more aspects connected to touristic development.

Sustainable tourism in 2010 will develop the idea of satisfying the needs of current tourists and of the current industry and, at the same time, protecting the environment and future opportunities. It is aimed to meet all the economic, social, aesthetic needs etc. of the „actors” of tourism, maintaining cultural, ecological integrity, biological diversity and all the systems that sustain life. At a macroeconomic level, the concept of sustainable tourism has not yet had a major impact. A set of recommendations have been made concerning the development of tourism in protected

areas. The concept of sustainable tourism has now become much more popular at a microeconomic level through the alternative of green tourism.

Cultural tourism

Cultural tourism is a type of tourism that is clearly differentiated from other forms or types of tourism, particularly through motivation. It can be defined as a form of tourist mobility and its primary purpose is broadening the horizon of knowledge through the discovery of the architectural and cultural-artistic heritage and of the areas where they originate. Cultural tourism is a form of exploitation of human resources and therefore it may include urban and rural-ethnographic tourism. Cultural tourism directs to the notion of heritage, which represents tangible and intangible components of any society's identity, developed, and then transmitted and updated in the territory. The tangible heritage includes museums, monuments, architectural ensembles, art cities, villages with well-preserved traditions, archaeological sites, gardens, religious or military buildings. The intangible heritage includes festivals and cultural events, traditions and creative skills accumulated over time.

Tourist flows are characterized in cultural tourism by setting up a clientele of its own which can be specialized in a particular topic (able to walk distances to capture yet another impressive aspect of their passion), or be attracted to all that is cultural, or incidental, which is usually majoritary and consists of those who, being on vacation for rest and recreation, are visiting and sightseeing in the areas where they are. Another feature of the flows involved in cultural tourism is the membership of the participants in socio-professional categories or having a high or mid-level education: pupils, students, intellectuals, and therefore its collective character is uncertain. Predominant in the composition of tourist flows is the urban population.

Effectiveness of cultural tourism is the lowest among all types of tourism, but its development also presents a number of advantages, which means that the demand is stable and ignores trends, as was the case with spa tourism. Expansion potential is enormous, especially in the context of globalization, when exotic sites such as The Easter Island are no longer so distant.

Ecotourism

Ecotourism, as a form of tourism, has emerged from people's need to withdraw in nature, to visit and learn about the natural areas which have or have not a national or international protection status. Ecotourism has been defined as: "Ecotourism means the trip taken in most cases in developing countries to relatively undisturbed natural areas for study, leisure or voluntary assistance (voluntary) which considers the flora, fauna, geology and ecosystems of an area itself, as well as the people living in the surrounding area, their needs, their culture and their relationship with the earth" (Swanson).

With the worldwide development of ecotourism came the recognition of the benefits of this type of tourism as an optimal exploitation "mechanism" of touristical and landscape resources. These characteristics of ecotourism were the reason why the United Nations declared 2002 the "International Year of Ecotourism". The attention that this form of tourism has from the United Nations is based on the recognition of the potential that ecotourism as a sustainable development tool has, a tool that can lead to achieving the three main objectives of the Rio Convention, namely: biological and ecological diversity conservation; promotion of sustainable use of biodiversity by generating income, jobs and business opportunities in ecotourism; fair distribution of benefits from ecotourism to local people and communities.

National governments should involve managers of protected areas and tourism industry in developing and implementing plans for sustainable tourism. These should be part of national sustainable development strategies and should be included in individual management plans of protected areas.

The measures for protected areas include: transforming current unsustainable development to more sustainable forms; setting sustainable standards for new developments, particularly in sensitive environments; designation of areas for different degrees of travel based on carrying capacity of protected areas, including sanctuaries and quiet areas, as areas suitable for different levels of tourist use and development; reducing pollution and decongestion of holiday traffic; avoiding excessive tourism and recreation in protected areas; ensuring that tourism benefits local communities; providing support and resources through early implementation of plans; training managers of protected areas in sustainable tourism.

Pioneering schemes should be promoted in sustainable tourism, for example: loans, grants or tax concession for farmers and local communities to develop small businesses that use protected areas in an appropriate manner; administrative projects to show an innovative approach on tourism, appropriate for local economies; use of EU and national funds for tourism to encourage sustainable tourism in Romania.

Next we will present some statistics regarding Romanian tourism for 2008.

The category other cities has the main share with a number of 1531 units, while the seaside disputes places 2 and 3 with spa resorts. The number of units for the seaside in 2008 was 934, while for the spa resorts it was 382 units.

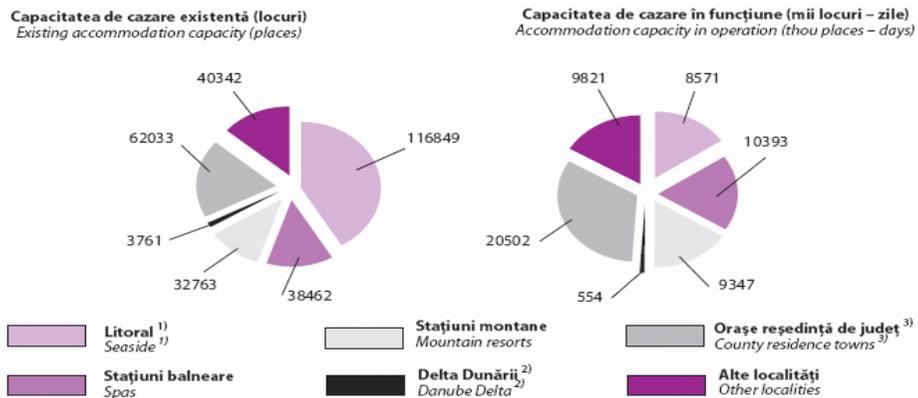


Fig.1: Existing accomm. capacity (places) and accomm. capacity in operation (thou places – days)

Source: Anuarul statistic al României, 2009

The Romanian seaside holds first place in terms of existing capacity, followed by the head towns of the counties and the spa resorts. Ranked lowest in this regard is the Danube Delta in terms of both existing capacity and operational capacity expressed in thousands of places-days (Fig. 1).

In the category of hotels, the highest rank is for the two-star and one-star hotels with an occupancy rate of 46.1% and 46.0%. The villas category is best represented by those not classified at a rate of 36.7%. Urban tourist pensions are best represented by five-star pensions, while the rural touristic pensions have a higher occupancy rate at five- and four-stars with an occupancy rate of 24.0% and 23.0% (Fig.2).

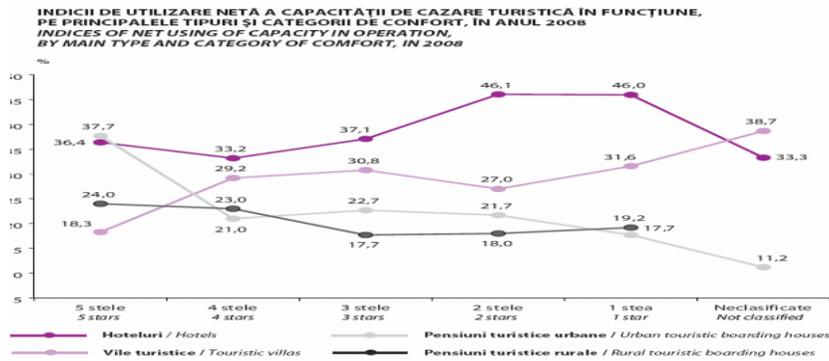


Fig.2: Indices of net using of capacity in operation, in 2008

Source: Anuarul statistic al României, 2009

The number of overnight stays has increased from 103,4% in 2006 to 112,1% in 2007 and to 112,8% in 2008 (Fig.3). This fact is mainly due to the increase of Romanian tourists' number of overnights from 105 % in 2006 to 114,1 % in 2007 and to 116,5 % in 2008. On the other hand, the foreign tourism, after an increase up to 103,5% in 2007, it decreased to 97,0% in 2008. 2005 is considered to be the 100% year.

Increasing internal tourism is due to the growth of the population's standard of living in 2008, the population assigning a rather high percentage of the family budget for consumption.

Alarming is the fact that the number of foreign tourists drops quite dramatically below the level of 2005 in 2008. As Romania is not labeled as a country with political instability, this decline may be due to the poor quality level of public service and to the rudimentary infrastructure.

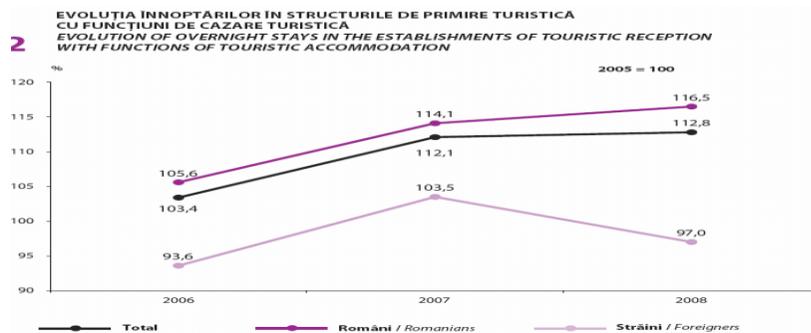


Fig.3: Evolution of overnight stays in the establishments of touristic reception with functions of touristic accommodation

Source: Anuarul statistic al României, 2009

In 2008, the number of overnights spent by category of comfort was the highest for the two-star category with 9.099 million overnights, followed by three-star hotels with 3.975 million overnight stays. What is striking is that the number of overnights in nonclassified accommodation structures is higher than the number of overnight stays in five-star categories. It seems that Romanians do not prefer high standards and settle for a lower level of travel services. Instead, foreigners are more demanding with comfort in the establishments of touristic reception and this can be best seen in five-star categories (Fig. 4).

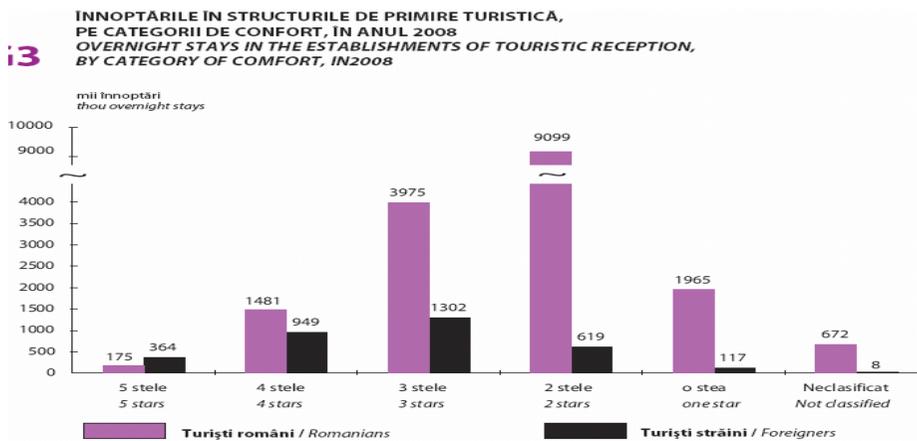


Fig.4: Overnight stays in the establishments of touristic reception by category of confort, in 2008

Source: Anuarul statistic al României, 2009

In terms of arrivals and departures of tourists at Romania's borders, there is an increasing trend of Romanian tourist departures abroad, meaning an increase from 6.5 million international travels in 2005 to 13,1 milion international travels in 2008. This upward trend is true for foreign tourists arrivals as well, meaning an increase from 5.6 million international travels in 2005 to 8,8 milion international travels in 2008. Unfortunately, as we have previously seen, foreign tourists do not stay a long period of time in Romania, fact demonstrated by the number of overnights spent by these foreign tourists.

In consequence, nowadays, we witness three main trends in Romanian tourism: sustainability, ecotourism and the increasing presence of cultural tourism.

Regarding statistical data, in what quantity is concerned, there is an increase in Romanian tourism, but in what quality is concerned (for example overnight stays) there is a setback for Romanian tourism in the last years. This aspect should make public authorities take concern in improving the infrastructure and the quality of the touristical activity and in diversifying entertainment.

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KEY ASPECTS OF ANALYSIS ON THE IMPACT OF RECENT DEVELOPMENTS IN HEALTH SERVICES IN THE WESTERN REGION OF ROMANIA

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The paper aims to establish the principal correlations and positions of the tertiary sector in the Romanian economy, for realistic assessment of the actions, decisions and developments in this field.

The research starts from the statistical analysis regarding the current condition and the importance of services, calculating dynamics and relevant percentages. It is also detailed the situation of health services in the western region. Its being inventoried some of the latest developments and of most impact, within them.

The effects of government policies are viewed from the angle of influence on economic activity, being performed a SWOT analysis adequate to the current situation. Attention is paid both to the direct impact, in the field, and the indirect one, in the economic life ensemble and society as a whole, short and long term.

The research results highlight the economic situation of Romania and the way in which economic activity is in close contact with the health system.

Keywords: Tertiary sector, medical services, health reform, economic development, sustainable development

JEL Codes: I18, R11

1. Introduction

Current economic theory recognizes the leading role that services play in economic and social progress. Their heterogeneity makes that, different services not to contribute equally to the economic growth, nor the magnitude and manner of involvement and action.

Central role in long-term evolution of the entire society, including the economic growth is detained by the knowledge intensive services (activities where the share is the intelligence factor, focused on high specialized qualification).

This paper examines some specific and general issues regarding the services in the Romanian economy, with particularization on the health services in Western Region, in the context of new health reforms.

2. Current state analysis of the tertiary sector in Romania

At the macroeconomic level, indicators are used to express both the size and the share of the attracted resources in this sector and the amount and the contribution of the effects produced by the activities of services to the general economic and social situation.

Based on analysis of dimensions and services sector interdependencies in the Romanian economy and society, it can track the current state of developments in this sector and effective strategies may be formulated for its future development.

Regarding the place of our services in the country's economy, a frame of employment can be extracted from the available statistical data, as shown in Table no. 1.

Table no. 1. Total employed persons in tertiary sector by type of activities (thousand persons)

Activities		1996	2000	2004	2008
I. Total employed persons		9379.0	10771.6	9410.4	9365.9
II. Total employed persons in tertiary sector (1), which:		2837.4	3149.0	3419.1	3670.9
1	Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	771.7	887.8	953.0	1166.1
2	Hotels and restaurants	115.6	120.4	142.0	136.3
3	Transport, storage and communication	547.1	476.7	456.6	498.8
4	Financial intermediation	71.3	87.4	86.8	98.0
5	Real estate, renting and business activities	257.5	194.2	327.6	345.4
6	Public administration and defense; compulsory social security	125.1	405.1	411.2	396.9
7	Education	441.3	387.2	406.1	389.0
8	Health and social work	337.2	324.0	362.2	387.4
9	Other community, social and personal service activities	170.6	266.2	273.6	253.0

Source: Eurostat, accessed April 22, 2011,

http://epp.eurostat.ec.europa.eu/portal/page/portal/national_accounts/data/database

From Table no.1 we see that employment in the tertiary sector has increased during the analyzed period with 833,500 jobs. Within this, the number of people working in health and social assistance increased from 1996 to 2008 with 50,200 persons, the increase representing only 6.02% of the total growth above.

Table no. 2. Dynamics of employed persons in tertiary sector by type of activities

Activities	1996	2000	2004	2008
Total employed persons (thousand persons)	9379.0	10771.6	9410.4	9365.9
Total employed persons in tertiary sector (thousand persons)	2837.4	3149.0	3419.1	3670.9
Health and social work (thousand persons)	337.2	324.0	362.2	387.4
Dynamics of employed persons in tertiary sector (%) (1996 = 100)	100	110.98	120.50	129.37
Dynamics of employed persons in social work (%) (1996 = 100)	100	96.09	107.41	114.89
The share of employed persons from tertiary sector in total employed persons (%)	30.25	29.23	36.3	39.19
The share of employed persons from Health and social work in total employed persons (%)	11.9	10.3	10.6	10.55

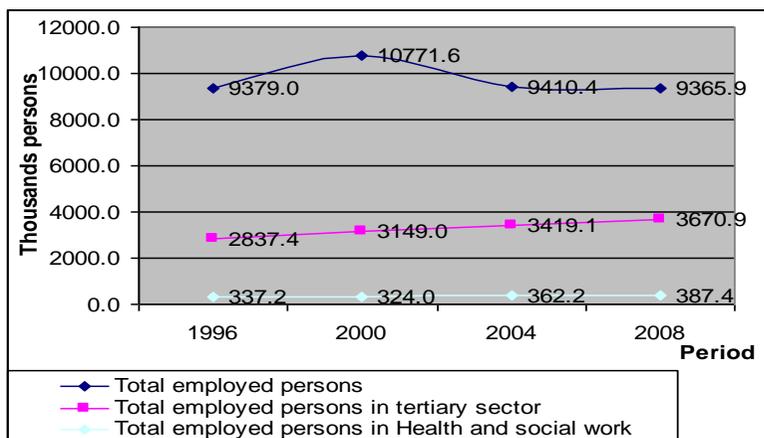
Source: Table no. 1

Analyzing the dynamics of persons employed in the tertiary sector (Table no. 2 - Dynamic calculated with a fixed base, the base year being 1996), it is noted that in 2000 there was an increase with 10.9% of the number of persons employed, in 2004 their number increased by 20.5% and in 2008 the increase was of 29.3%, compared with base year 1996.

Dynamics of persons employed in health and social care, calculated also with a fixed base, indicate a decrease of 4% in 2000, an increase of 7.4% in 2004 compared with the base year and in 2008 the increase was 14.8%.

The percentage of persons employed in the tertiary sector in total employment in Romania was 30.25% in 1996, and in 2008 it increased to 39.19%. In contrast, the percentage of employed persons in health and social care compared to the total persons employed in the service sector dropped from 11.9%, as being recorded in 1996, to 10.5% in 2008.

Dynamics of the number of employed persons in health and social care and the tertiary sector in total can be seen in Figure No.1.



Source: Table no.1

Figure no. 1. Dynamics of employed persons in tertiary sector

In what regards value data of services sector size and the gross domestic product at the national level (last years) as well as the contribution of services to the GDP creation, see Table no. 3.

Table no. 3. GDP and Services in Romania (dates from 2009)

GDP (mil lei – current prices)	PIB (mil lei – constant prices)	Services (mil lei – current prices)	Services (mil lei – constant prices)
491273	342176.35	246306.2	166069.67

Source: „, Statistical Breviary: Romania in Figures”,

<http://www.insse.ro/cms/files/publicatii/Romania%20in%20cifre%202010.pdf>; accessed April 16, 2011

And INS, <https://statistici.insse.ro/ipc/>; accessed April 17, 2011

Compared with the developed countries where the share of services in GDP creation is 60-70%, in Romania, as shown in Table no. 4, the percentage of services in GDP does not exceed 50%.

3. Medical services analysis in the western region in the context of new health reform

Medical services are part of the services dedicated to the population and are meant to maintain the health and vitality of the population, with direct effects on the living standards of individuals, but also in the functioning and development of the economic mechanism. (Jivan and Fruja, 2006: 96).

In Romania, in the last 20 years, the medical system has gone through various reforms. The new health reform was initiated in 2010 through the decentralization of hospitals, namely the public health units were transferred to the local administration. For the period 2011-2012, it was formulated the national strategy of streamlining the hospitals and health system.

The strategy stipulates measures to reorganize the Romanian health system for a sustainable financing, for remodeling the demand of health services and a strategy directed towards the human resources that states that it is wished to stop doctors leaving abroad. The problem that arises, concerns the realism of such decisions, in the conditions when they are strongly contested by civil society, by many professionals and service providers in the field and in the context in which it is avoided the debate in the Legislature (the adoption of reforming laws is based on the principle of government accountability in parliament).

The most drastic reform proposed through the Ministry of Health strategy was the one that began the cancellation and fusion of hospitals. This paper makes some specific references to the manner

in which this decision affected the quality of medical services in Western Development Region (Arad, Caraş-Severin, Hunedoara and Timiş).

Western development region's population, on July 1st 2009 was about 1,921,700 inhabitants, representing 8.95% of the Romanian population. This region is considered to be a growing region, with above average national economic performance, often in second place after Bucharest-Ilfov.

Table no. 4. Health units, 31 July 2007

Region / County	Hospitals	Polyclinics	Dispensary	Sanatoriums T.B.C.	Medical Offices
Western Development Region	47	4	31	2	89
Arad	12	-	2	-	35
Caraş-Severin	8	2	6	-	-
Hunedoara	11	1	18	2	1
Timiş	16	1	5	-	53

Source: Romanian Statistical Yearbook 2008, NIS, 2009

As shown in Table no. 4, in Western Development Region, on July 31, 2007, 47 hospitals activated that carried out ill treatment related activities. Starting with April 2011, according to an order given by the Ministry of Health, as part of "crisis measures" of the Romanian government, several hospitals have been abolished and readjusted (converted into alms houses).

The measure is questionable in terms of related operating costs, because the alms houses will have to be sustained by public funds). Thus, in West region, 11 hospitals were abolished and 10 hospitals were merged with larger hospitals in the region. Of 47 existing hospital on July 31, 2007, from this year, only 26 hospitals will be operating in the context of lacking personnel in hospital units and no hiring can be made because of restrictions imposed by the government.

Along with the abolition of hospitals its been declared (as motivation / logic support) the monitoring of the system's functionality, with the aim to apply an appropriate treatment to the patients and solve financial problems by attracting new funds to health system, according to Ministry of Health.

But the transition to the hospital closures and fusions was done without creating specialized ambulatory units in place of the abolished and with no investment made in road infrastructure by the Ministry of Transport. For example, in Caraş-Severin county, especially in winter, are encountered problems on the road, and the transport of patients to the hospital from Reşiţa is now carried out under the risks of delays caused by these roads.

It is foreshadowed, therefore, the practical impossibility of achieving the appropriate specialized medical services for the population in areas that will remain without hospitals because of the lack of the required centers for ambulatory medical services, of reduced number of medical establishments in general (abolition of the hospitals) and of the given infrastructure .

Critical comments made above with reference to the affected individuals should be extended over economic units in the area (where is working the population registered in the medical units abolished), with hard to predict impact in the domain of labor factor productivity in the long term.

Really positive main effects that could become apparent are that, by abolishing some hospitals will be made some short-term cost reductions (in near future), and through this project it could be covered the deficit of social centers that the Western Region has, this social sector will take over abandoned buildings.

The possibility of reducing costs regards especially those designed to provide management services by merging three or four hospitals. Their leadership will be provided by a manager or

specialized management firms (for couple hospitals at the same time), with effects in costs and in the leadership act (management, administration).

But these potential savings will have to be first validated in relation with the actual achievable functionality under the new conditions. Because the diversity and the increase of complexity can create management problems, which often counteract the positive effects. In addition, if we can be optimistic about professional management, not the same can be said about the "cost" changes, existing - by now - certain losses that can not be avoided or counteracted.

We take into account that the abolition deflected on certain hospitals where, in recent years were made significant investments and expenses; under new conditions, they will be practically lost (wasted utility, will be decommissioned, placed in conservation, abandoned, being performed in purposes from what those units are now diverted). Also, in conceptual and organizational point of view, many were small hospitals of local interest. It makes sense that, the abolition of all this means reduced capacity for the provision of medical services.

Specifically, hospitals abolished from the Western Region had made in the past years, investments in renovation and endowment with the appropriate equipment (from local communities). For example, in Buziaş (balnear resort from Timiș county), many tourists spend their holidays and in the local hospital where there is a double line on-call as well as specialists that provide quality medical assistance both to tourists and inhabitants. Instead of the abolished hospital currently does not operate even a balnear clinic.

The funds intended to a hospital will now be used by all hospitals belonging to one fusion, which constitutes a threat to the competitive spirit and hence of the quality and professional performance in the long term: Each hospital has allocated certain amounts of money for its functioning and the distribution is at different levels, depending on the number of patients treated and cured; certain hospitals may thus provide more financial resources than others. But under new organizational formula, these funds will be practically used by all hospitals participating to the fusion.

Table No. 5. Summary of SWOT analysis through abolition and merging of hospitals

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> - cost reductions; - instead of abolished hospitals will operate retirement homes, orphanages (West Region has a deficiency of such centers). 	<ul style="list-style-type: none"> - staff reductions (regardless of the activity type); - loss of certain investment (converting them into useless); - loss of local interest services related to the abolished medical units
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> - possible modernizing changes in the hospital management. 	<ul style="list-style-type: none"> - lack of specialized health care insurance, due to increased distances, for patients, up to medical units and in deficient of road infrastructure in some areas; - for fusion, the funds destined to a hospital will be used by all hospitals that are part of the fusion; - possible management problems, quality being compromised.

Source: made by author

4. Conclusions

In conclusion to the shown above, it follows that funds savings are possible especially by reducing the number of salaries paid for management positions by the hospital), but which are also small in relation with the existing financial problems, and related destructive effects are so large, profound and extensive, including long-term that can not be justified.

The shown numbers demonstrate the strong entry of Romania in crisis, including services (economic sector had recorded the strongest increases in the economy after 1989). Maintaining services under 50% of GDP, with often falling trends proves not only the crisis but also the precariousness of the Romanian economy.

The Optical of the declared reforming measures is, in fact, a crisis one, but anachronistic through adequate perception of industry, applied on a domain which is not industry and where are some defining features that make measures inapplicable, of "labor productivity growth" available in industry (Gadrey, 1996). Ignoring these characteristics is paid dearly, unfortunately not by those who choose wrong (in our country, at least), but by the beneficiaries of the measures imposed by government and service providers in domain.

Romania must rely on its main assets: (i) educational level (still) high, which is an important opportunity to development of intensive services in knowledge (information services, research, health) and (ii) low cost of labor that, generally speaking, is a key attraction for foreign investors, both in services and in other economic sectors.

Unfortunately for the Romanian medical system - as well as other services - this factor (chip labor, low salaries that are paid to Romanians) is what determines the migration of qualification carriers and labor towards richer economies, in conditions of major progress in field in rich countries (Walker 2010).

Doctors leaving the country falls in the phenomenology known as "theft of gray matter" or "brain drain"(Christian Dustmann, Itzhak Fadlon and Yoram Weiss) and it is happening in terms of a lack of national policies and has all the economic, social effects, general, for the nation, especially we can not put any question that there is no need of the doctors that decide to leave the country, quite the contrary. Such negative phenomena are being encouraged by government measures such as those discussed in the paper (which is visible through actual developments in the recent months).

Before starting the health reform related to the hospitals abolishing, professional analysis were required (under conditions of knowledge of specific - including managerial - of the domain), in consultation with specialists, for finding (other) solutions to reduce costs, it was required including the detailed analysis of the economic situation and performance of hospitals proposed for dissolution. Thus, it was crucial to analyze the situation of hospitalized patients, of those discharged (treated case = case resolved), of the performance of medical staff in the Western Region and from other regions of the country (a non-political relevant economic analysis).

Such consultations and documented training would have provided a consensus, solutions quality and their applicability, as opposed to the measures taken against the will of those included in the process. Adhesion value (which is completely ignored in most measures of the current government) is one that can be found including in productivity and in cost reduction (in the case analyzed, unfortunately, it will be found in a negative sense, as the lack of adhesion).

Acknowledgements

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Note

(1) Total tertiary sector activities were calculated as the sum of employed persons from related activities: “Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods”, “Hotels and restaurants”, “Transport, storage and communication”, “Financial intermediation”, “Real estate, renting and business activities”, “Public administration and defense; compulsory social security”, “Education”, “Health and social work” and “Other community, social and personal service activities”.

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THE POTENTIAL OF FEMALE ENTREPRENEURSHIP AS A REGIONAL GROWTH AND DEVELOPMENT ENGINE IN THE WESTERN ROMANIA

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Starting from the objectives, activities, and the results of the empirical, quantitative, and qualitative research carried out in the AntrES50 project, during the two years of implementation, in the Western Romania referring to the new businesses start up; business development; the motivation and difficulties of female entrepreneurs and potentially enterprising women; of their perceptions regarding the need for entrepreneurship education, the role of female entrepreneurship promotion and the impact of the successful models on new businesses start up – this paper presents directions of action meant to emphasize and support the potential of the female entrepreneurship in Romania, as a regional growth and development engine.

Key words: women entrepreneurship, new businesses start up, regional development

JEL Codes: B54, H81, M13, M21, R11, R28, R53, R58

REL Codes: 13C, 14D, 14 K, 16H, 18F, 18G, 20J

The potential of female entrepreneurship – as a research subject

The analysis of the potential of female entrepreneurship in Romania starts from the premise that encouraging and supporting new businesses is one of the most important economic and social activities due to the impact on economic growth, innovation, job creation and the rise of living standards (Brush Candida *et al.*, 2007). The literature in the field shows that women play an important role in the economic activity in many of the world's economies (Miniti *et al.*, 2005, apud Brush Candida *et al.*, 2007). According to Global Entrepreneurship Monitor (GEM, Reynolds *et al.*, 2003), women represent 33% of the total of those initiating a business, with variations from a country to another according to cultural factors, natural and industrial resources together with the policies meant to stimulate the entrepreneurship and the attitude and faith in the female entrepreneurship. Although the number of business women is increasing, the rate of female self-employment is systematically lower than that of men (Schmidt and Parker, 2003, apud Brindley Clare, 2007).

For Romania, studies show that for all the development regions, the most important problems in stimulating the spirit of female entrepreneurship are the low density of SMEs, the limited entrepreneurial culture, the reduced entrepreneurial spirit, especially among women and mainly in the rural area, the lack of programmes promoting entrepreneurship, especially female entrepreneurship, the lack of programmes supporting self-employment initiatives.

Taking into consideration these aspects, our research is trying to emphasise that through measures educating the entrepreneurial culture among women – as a determining factor of self-employment, the percentage of those setting up a business may increase significantly with a direct impact on the regional development. In our opinion, this aspect is significant, taking into account that we are referring to a single measure – that of educating and motivating the female entrepreneurial spirit which can, correlated with measures supporting the access to financing, improving the social assistance system and especially supporting children's raise and education (Brindley Clare, 2007), lifelong learning (Drumond, 2004), supporting the development of the

⁵⁰ AntrES – acronym project “*Antreprenoriatul și egalitatea de șanse. Un nou model de școală antreprenorială pentru femei*” (“*Entrepreneurship and Equality of Chances. An Inter-regional Model of Entrepreneurial School for Women*”- T.N.)

business (Brindley Clare, 2007), promoting the female entrepreneurship by successful business women, promoting good practices, determine the significant increase of this objective, underlying the still unexploited potential of Romanian female entrepreneurship.

Objectives and directions of action – aspects regarding the research methodology

Taking into consideration these premises, our research was delineated on at least three directions, of those mentioned above, that is:

- to ensure the female entrepreneurial education for the support of new business start up;
- to support the development of already initiated businesses;
- to promote and motivate the female entrepreneurship.

Our three objectives could be materialised by implementing the project “*Entrepreneurship and Equality of Chances. An Inter-regional Model of Entrepreneurial School for Women*” (acronym **AntrES**), implemented in the North-Western and Western Regions of Romania (counties Maramureş, Satu Mare, Bihor, Arad, Timiș, Caraș-Severin)⁵¹, which had as objectives, among others:

- *to provide training in order to acquire capabilities in the field of business start up; to provide training in the field of entrepreneurial culture formation and promotion, in order to improve the level of knowledge regarding a successful business initiation, organization, and working;*
- *to provide training for women in the field of business administration and development and to favour the improvement of the entrepreneurial spirit within the SMEs having women as managers or administrators;*
- *to promote and stimulate the entrepreneurial spirit among women so that they can behave as active entrepreneurs; to promote active learning, lifelong learning, including the e-learning methods and techniques; to promote the competition spirit by organizing contests and awarding the best business plans.*

AntrES project addressed a number of 1800 women of the six counties situated along the Romanian Western border, grouped into three target groups. The first target group is made up of 288 women, *SME managers, wishing to develop their business, from the counties situated along the Romanian Western border (Maramureş, Satu-Mare, Bihor, Arad, Timiș, Caraș-Severin)*. It concerns, at the level of each county, a number of 48 women managers who have been trained in the town where they work, as it follows: 24 at the territorial centre situated in the county capital city and 24 at the level of local centres (6 for each of the 4 local centres in each county), respectively a total of 288 women in all 6 counties. For this target group the project had in view the improvement of the intra- and entrepreneurial managerial skills in order to develop the existing business, to optimally use the opportunities existing on the market, the success factors increasing competitiveness, the management and marketing strategies etc. and the promotion of the adaptability, with effects on the performance, stability of SMEs and the employment level. The second target group is made up of 1440 women *wishing to start up their own business, in the counties situated along the Western Romanian border (Maramureş, Satu-Mare, Bihor, Arad, Timiș, Caraș-Severin)*. It concerns, at the level of each county, a number of 240 women, trained where they live, as it follows: 24 at the territorial centre situated in the county capital city and 72 at the level of local centres (18 for each of the 4 local centres in each county), 144 at the level of rural centres (12 for each of the 12 rural centres in each county), respectively a total of 1440 women from all the 6 counties. For this target group the project had in view the formation of entrepreneurial culture, the increase of the ability to transform business ideas into actual actions,

⁵¹ For more information, see www.antres.ro

by providing the necessary information regarding the business environment and the local existing opportunities, the drawing up of a business plan, the organization and carry out of a successful business etc. and by services supporting the initiation of a business, having as effect the generation of an increased number of businesses, both in the urban and in the rural areas. The third target group is made up of 72 women, last year students in Economics who have been trained to become coordinators in the entrepreneurial field and who currently have a job as rural coordinators in the project. It concerns, at the level of each county, a number of 12 women, selected from in the partner university centres, respectively a total of 72 coordinators at the level of the 6 six counties. For this target group the project had in view the acquisition of the coordinator skills in the field of business start up, the increase of these people's capacity to become promoters of entrepreneurship, as well as the increase of the awareness and promotion of the positive attitude to entrepreneurial culture and to offer services supporting the start up of a business.

Research study and results

To reach the three objectives mentioned previously, the activities carried out in the six counties in the implementation area on three levels: territorial, local, and rural, were channelled on the following directions:

1. The organization of courses in the Entrepreneurial school for women, *Start up of Business* – courses attended by a total number of 1512 women; the impact of these training activities in the entrepreneurial field on women wishing to start up their own business can be seen in the openness regarding the training activities, the avowal of the need for entrepreneurial education and counselling “*The courses of Entrepreneurial School have been for me the first encounter with economic theory... I have acquired a theoretical basis which, collocated with the already existing practice, form a solid basis for the business I want to start up.*” (Meluț Corina, Oradea, Bihor); “*... this course represented an important opportunity being provided with all the latest necessary information in order to start up a business. The form of presenting the information was clear, concise, and mostly accessible... the project team has had the highest contribution ... which provided the necessary counselling, during the entire learning process ... the knowledge acquired here will represent an important support in my future business. ((Roiban Roxana, Timișoara, Timiș); “... to accumulate new knowledge, to deepen new concepts, to better assess the qualities a female entrepreneur needs and, with the help of the business plan, to evaluate the business we wish to start up ... it has greatly facilitated the communication and interconnection among us...” (Vărguța Marta, Arad, Arad); the opportunity of training activities for personal development “*It has been an opportunity which helped us to make n important step for my professional development. I have discovered managerial qualities that I did not know I had (Tanko Erika, Satu Mare, Maramureș).**
2. The organization of courses at the Entrepreneurial school for women, *Business Development* – courses attended by a total number of 288 women managers of the six counties. The impact of the training activities on the women managers is also significant: personal development: “*... it helped me rediscover myself and develop professionally. These courses have taught me how to present myself professionally, my knowledge and experience acquired through practice*” (Dăncescu Livia, Oradea, Bihor); the opportunity to meet successful women managers and to share the

experience and difficulties of running a business “...the experts invited shared aspects from their own successful experience, which has been beneficial for me.” (Anton Maricica, *Timișoara, Timiș*); the desire to improve, motivation and reciprocal encouragement “....I have had the opportunity to learn new things, which are of real help to me both in running the business that I currently have and in assessing the business I want to set up. The use of action learning method allowed us to discuss with the other business women about the achievements and hardships we had encountered when running our businesses, to share our common experiences to the women wishing to start up a business” (Tașcă Carmen, *Arad, Arad*); “...the theoretical part and the practical studies, too ... have helped me involve and motivate the partners through a positive control of the business, each trying to understand that that the performance of a firm is not only revenues but other factors such as financial control factors, employees and generally the performance of the entire activity”. (Azap Mihaela, *Reșița, Caraș Severin*); “... women were poorly represented in the business environment, stimulating and encouraging through this course the women’s initiative regarding the development and initiation of their own businesses in order to acquire financial independence and to bravely enter the business world ...” (Laza Doina, *Satu Mare, Satu Mare*).

The integration of the *Action Learning* [1] method in the AntrES Entrepreneurial School, for both categories of courses – *Business Start up* and *Business Development*, had in view the achievement of the objectives proposed beyond the simple supply of a set of knowledge for the initiation, development or support of the business, by determining the change based on learning, in the real meaning of the word. The use of the action learning method “with and from the others”, by forming mixed sets (groups) – made up of women of all the three target groups: women managers of their own business wishing to develop it, women wishing to start up their own business and last year students in Economics, who have been trained and have become coordinators in the field of entrepreneurship; therefore, women with and without any entrepreneurial experience, in different stages of knowledge and understanding of entrepreneurship. Within these sets, women have been encouraged to discuss freely, based on the subjects suggested by the course book and applications, and also from the perspective of their own experience, being stimulated to share their own problems and to mutually give advice to each other, to ask and answer, being an inspiration for the others, mutually motivating, learning from each other. In completing and stimulating the use of this method, an external expert, preferably a well-known woman entrepreneur or a woman with well-known professional capabilities was invited for the subject tackled, at the level of that particular city or village, willing to share with the course participants her success story or her own experience in the field.

3. The organization of the contest “*My Business Plan*”, where all the 1800 trained women participated. The contest “My Business Plan!” was organized on three levels, in order to evaluate, select, emphasize, promote, and award the best Business plans made by the course attendants trained in the project. The contest was open to all the participants to the training activities from the target groups of the project, that is a total number of 1800 women. It took place in 2010 in three phases, thus: 1st Phase – Levels: territorial – selection / inter-regional – prize award; 2nd Phase – Levels: local

– selection / territorial – prize award; 3rd Phase – Levels: rural – selection / territorial – prize award. Each of the phases of the contest “ My Business Plan!” had 2 stages:

- *Highlighting the business plans* – a stage where all the business plans entered the competition, business plans made by the women selected in the target group in the Entrepreneurial school for women, a stage in which, after the Evaluation Commissions evaluated the business plans, 50% of the business plans from the urban areas were highlighted and 30% from the rural areas. The highlighting of the business plans was made by giving diplomas. The business plans have been promoted on the site of the project www.antres.ro in the section *AntrES Winners – The Presentation Catalogue of the Winners, 1st, 2nd and 3rd Phase*⁵², and through mass-media during the actions meant to ensure the visibility of the project, information and advertising regarding the project. As a result of this stage, a total number of 724 women from the three target groups of the project were highlighted and promoted, 387 from the urban area and 337 from the rural area, as well as the business plans made by them at the Entrepreneurial school for women.
- *Awarding the business plans*, a stage where only the business plans recommended in the previous stage participated. After the contest at this level, out of the 724 business plans highlighted and promoted, a total number of 408 business plans were recommended to be awarded. These plans entered the 2nd phase of evaluation, after which **111 women wishing to start up their own business were awarded**, with minimum amounts necessary to initiate the business (amounts ranging between 1000 and 2000 lei).

The impact of organizing this contest and the activity to promote the female entrepreneurship have determined then increase of the motivation among women wishing to start up a business, which has determined the setting up of total number of 180 businesses in the six counties where the project was implemented.

Taking into account the demonstrated impact on the female entrepreneurship of entrepreneurial education, of the models, of the learning from the other’s experience, success or mistakes, by using the *Action Learning* method , mainly characterised by *Learning with and from the others*, the AntrES Entrepreneurial School had in view – and we believe it succeeded – to help the women managers to better understand their business, to develop it and to become real *entrepreneurs*, the women wishing to start up their own business to give them the necessary courage and force to attract and mobilize resources in order to become entrepreneurs, and the young coordinators in the field of entrepreneurship to transform them into promoters of entrepreneurship from conviction and not from necessity.

This paper represents an attempt to contribute to the increase of awareness of the entrepreneurial potential in the Western Romania and not only, the encouragement of female entrepreneurship, an instrument to disseminate knowledge, information and practical experience resulted from this project.

Acknowledgments:

⁵² See www.antres.ro, *Catalogue of AntrES Winners 1st phase* – territorial level selection / inter-regional level prize award; *Catalogue of AntrES Winners 2nd phase* – local level – selection / territorial level – prize award, *Catalogue of AntrES Winners 3rd phase* - rural level – selection / local level – prize award.

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Notes:

1. According to the *Action Learning* method (“*Learning with and through action*”), the difference between *to know* and *to understand* is the following: *to know* means to be capable of doing it; *to understand* means to be capable of changing the reality that you understood. *Learning means Progress*, which in its turn represents our capacity to produce *the Change into better*. The use of the *Action Learning* method starts from the premise, widely accepted in the literature, that entrepreneurship is learnt to a higher extent through informal or non-formal means than through the formal education system.

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THE DYNAMICS OF THE ROMANIAN UNIVERSITIES GRADUATES NUMBER IN THE 2005-2010 PERIOD

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In the context of the European single market, where information, capitals, persons, goods and services circulate free and fast, where economic rationality is different at the global level from the national one, radical mutations occur in each member state's strategy with regard to the educational system. Therefore, the Romanian educational system, especially the Romanian higher education must correlate the graduates number with the Romanian and EU labour force requirements, and take into account the necessities imposed by the participation at international competition. On the other hand, a country's economic and social development level depends very much on its citizens' educational level, especially in nowadays knowledge-based society, which is a society of life-long-learning.

Key words: knowledge-based society, education, human capital, universities graduates dynamics, economic growth

JEL Classification: I21, I23, I25, J60

1. Introduction

In the actual knowledge-based society, the issue of economic education is more important than ever, but professional-economic elements remain the easiest to teach and to learn: that is because education in their direction does not need special efforts from individuals, being on a most „natural” line, from the point of view of the millenniums of surviving on this planet; there are not necessary special orientations and transformations of the human being, because they are not related to cultivation and to human personality development, but to *surviving*. They are consistent rather to what any living creature on the earth learns: they are in our instincts and need no special educative intervention. But for humans, the human superior ones are essential, defining for our specie (compared with other creatures). That is why the care for youth' education was mostly for cultivating the qualities that put and keep them over the animal kingdom.

Even in the modern times of market culture, teaching should contain all the components, in different proportions; by its nature, level and speciality, it should not be partial, simplistic or conducting young people to perceptions that could badly make them not human (non-superior) beings.

Throughout the modern history, all countries of the world have been focused on economic development. Contemporary world comes back to the real purpose of economics, the human being, assuring his welfare and security, both at individual and social level. Thus, it appears on the ideas level a new conceptual paradigm, that of human development, which accompanies and motivates the economic one. This new paradigm has obviously not manifested itself instantaneously, but has developed as a slow, difficult and deliberate process. The rapid rhythm of changes has convinced both the business people community, and the nations, that labour force flexibilization is necessary. Each sector of activity, including the agricultural one, needs a permanent qualification up-date, combined with the accumulation of action knowledge and competencies. This irreversible trend represents a proof of the increasing importance of some “intangible” points in the investments field – such as education – while the effects of the “intelligent revolution” are being felt. In this case, investment in education becomes a strategic investment. As Jacques Delors, the president of the International Commission for Education states: “*In the 21st century,*

educational systems must educate in an innovating spirit, promote the capacity of evolution, adaptation to a fast changing world, that each individual should be capable of assimilating” (Ciobanu 2003: 15).

2. The Importance of Human Capital Education

In this respect, Adam Smith – in his famous work “The Wealth of Nations” - observes that human capital is not just a form of capital, but also the most important of these; it represents the acquired or useful capacities of the members of the society, capacities which are in both the property of an individual, and in the welfare of the society he belongs to. *„The perfected skill of a worker may be considered as a tool which improves labour and which, even if it is costly, requires a certain expense, yet returns this expense as a revenue for him and the community he belongs to”* (Smith in Ciobanu 2003: 15). Practically, *the human capital* is composed of *the educational capital*, represented by the skills acquired by individuals during and outside the education process, and *the biological capital*, represented by the individuals’ physical skills, the most often synthesized by their health state. Human capital has developed itself as a concept in economy, where it is mainly regarded as “estimation of a person’s ability to produce income by labour” (Cismaş and Popovici 2009:57).

Education in a knowledge society will have a strong social goal. The new educational system must be an open one, conceived to assure equal chances of education for all the members of the society. The capable ones must have free access to studies, so that their social growth is allowed, irrespective of the origin, revenues and prior education. In a knowledge society, it is necessary that all educated persons systematically return to school; it is particularly the case of those with higher education. The continuous formation will become “an industry”, which might register a strong progress in the future. The educational title, the studies diploma will facilitate the access to the best work places and to the most promising professional carriers, only if it is given based on competence criteria, of capability and talent, and not on the criterion of welfare, being, in such case, a symbol of the social class.

Practically, this last key – requirement imposes that “the product” of education be an educated, efficient and cultivated person, irrespective of her social condition (www.realitatea.net).

An important motivation of individuals to invest in education is based on the idea according to which accumulated knowledge and competencies tend to lead to a growth in productivity and, implicitly, of the potential earnings. Another important reason for accumulating a high level of education is getting a higher stability on the labour market, which implicitly reduces the risk of unemployment. Educated workers have a higher rate of participation on the labour market, and the length of their active life is generally higher than in the case of the persons with a lower level of education (Suciu 2000: 31).

3. The Dynamics of the Romanian Universities Graduates Number in the 2005-2010 Period

Professional insertion of young people has lately become, both in Romania and in the European Union, a difficult process, which requires an increasing period of time from the moment of finalizing the last form of education, until the moment of finding a work place.

Today exist in the world about a billion young people with the age ranging between 15 and 24 years old, 85% of them living in developing countries. The participation rate on the labour market among young people has decreased at a world level from 59.3% to 54.4% during 2004-2010, mainly because of the prolonging of studies among young people. In the European Union currently live about 62 million young people, which represent 12.7% from the total population. According to the data supplied by the National Institute of Statistics, there is a decreasing trend with regard to the evolution of young population until 2025. This

evolution may be explained by the decrease in the birth rate, the increase of the period and level of education, the social mobility, women's emancipation. Regarding young people's unemployment rate in Romania, it was of 22.1% in 2010, a little higher than the average unemployment rate in the European Union (Table no. 1). This situation can be explained, on one hand, by the inexistence of a correspondence between the educational (too much theoretical) level and the requirements of the labour market, and, on the other hand, by the companies' desire to employ qualified labour force. The lower unemployment rate among young people with higher education, in comparison with other categories, as well as the fact that the smaller the necessary period for finding a work place, the higher the educational level is, brings an increasing importance to the diploma at the beginning of the career.

Table no. 1. Unemployment Rate among Young People less than 25 Years Old (in %)

	2005	2006	2007	2008	2009	2010
UE 27	18.7	17.4	15.6	15.7	20	20.9
Belgium	21.5	20.5	18.8	18	21.9	22.4
Bulgaria	22.3	19.5	15.1	12.7	16.2	23.2
The Czech Republic	19.2	17.5	10.7	9.9	16.6	18.3
Denmark	8.6	7.7	7.9	7.6	11.2	13.8
Germany	15.5	13.8	11.9	10.6	11.2	9.9
Estonia	15.9	12	10	12	27.5	32.9
Ireland	8.6	8.6	8.9	13.3	24.4	27.8
Greece	26	25.2	22.9	22.1	25.8	32.9
Spain	19.7	17.9	18.2	24.6	37.8	41.6
France	21.1	22.1	19.6	19.1	23.5	23.3
Italy	24	21.6	20.3	21.3	25.4	27.8
Cyprus	13	10.5	10.1	8.8	14	17.8
Leetonia	13.6	12.2	10.7	13.1	33.6	34.5
Lithuania	15.7	9.8	8.2	13.4	29.2	35.1
Luxembourg	14.3	15.8	15.6	17.3	16.5	16.1
Hungary	19.4	19.1	18	19.9	26.5	26.6
Malta	16.2	16.5	13.8	11.8	14.4	12.9
Holland	9.4	7.5	7	6.3	7.7	8.7
Austria	10.3	9.1	8.7	8	10	8.8
Poland	36.9	29.8	21.7	17.3	20.6	23.7
Portugal	16.1	16.3	16.6	16.4	20	22.4
Romania	20.2	21.4	20.1	18.6	20.8	22.1
Slovenia	15.9	13.9	10.1	10.4	13.6	14.7
Slovakia	30.1	26.6	20.3	19	27.3	33.6
Finland	20.1	18.7	16.5	16.5	21.5	21.4
Sweden	22.6	21.5	19.2	20.2	25	25.2
Great Britain	12.8	14	14.3	15	19.1	19.6

Source: <http://epp.eurostat.ec.europa.eu>

Spain registered in 2010 the highest unemployment rate, with a percentage of 41.6%, and Holland the lowest one. Employment rate among young people (15-24 years old) is much lower than that of the total population, because many young people are still included in the educational sytem and don't have a work place. On the other hand, the decrease in young people employment can also be determined by their migration abroad, the decrease in the birth rate and the black economy.

By analyzing Fig. no. 1, we may observe the doubling of the faculty graduates number, from 108,000 in the university year 2004/2005, to 214,000 in 2008/2009.

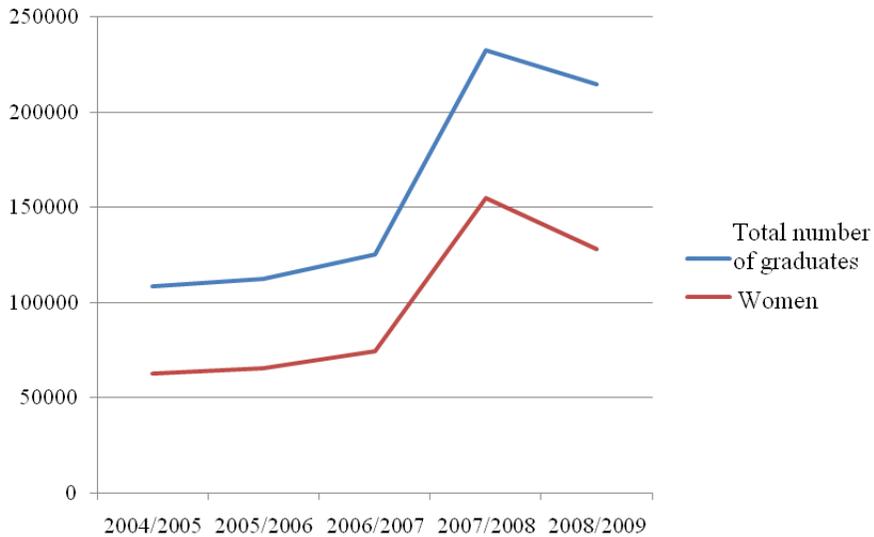


Fig. no. 1 The Evolution of Graduates Number

Source: Made by the author based on *The Statistical Annuary of Romania, 2010*, pp. 247

The number of women faculties graduates has registered an increasing trend in 2004-2009. This phenomenon may be explained by the increase in the educational supply from the private and state universities and of increasing qualficare requirements for obtaining a work place.

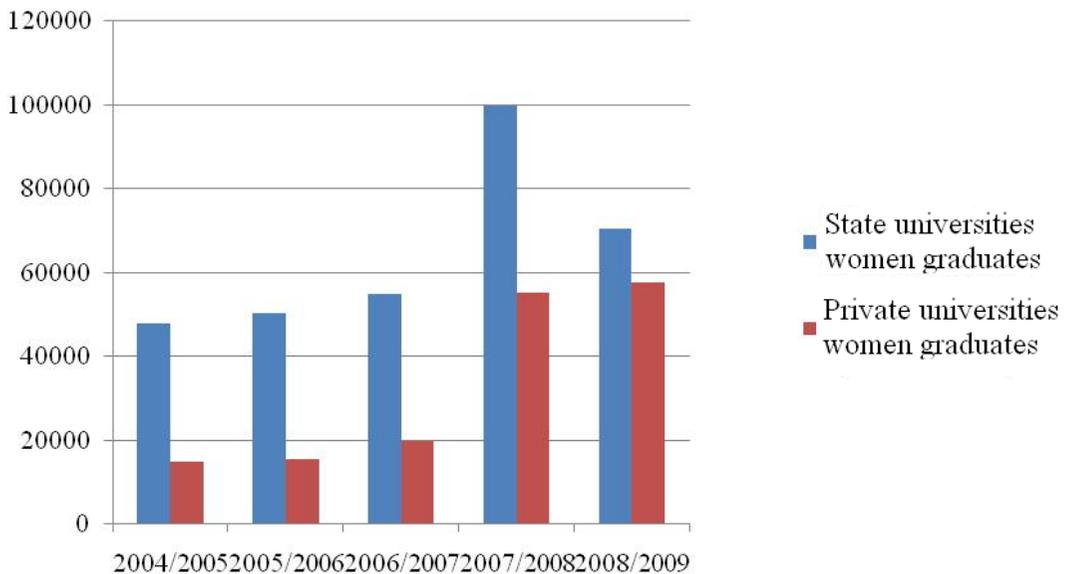


Fig. no. 2 The Evolution of Women Graduates Number

Source: Made by the author based on *The Statistical Annuary of Romania, 2010*, pp. 247-249

From 2004 to 2008, the women graduates number was increasing, but in 2009 it decreased, reaching 128.000 (Fig. no. 2). In 2009, the lowest difference between state faculties and private faculties women graduates was registered: about 13,000 women graduates. By analyzing Fig no. 3, we may observe that the number of state faculties graduates is higher than that of the private ones. This difference considerably diminished in 2008, when private faculties graduates represented 42% of the total graduates number.

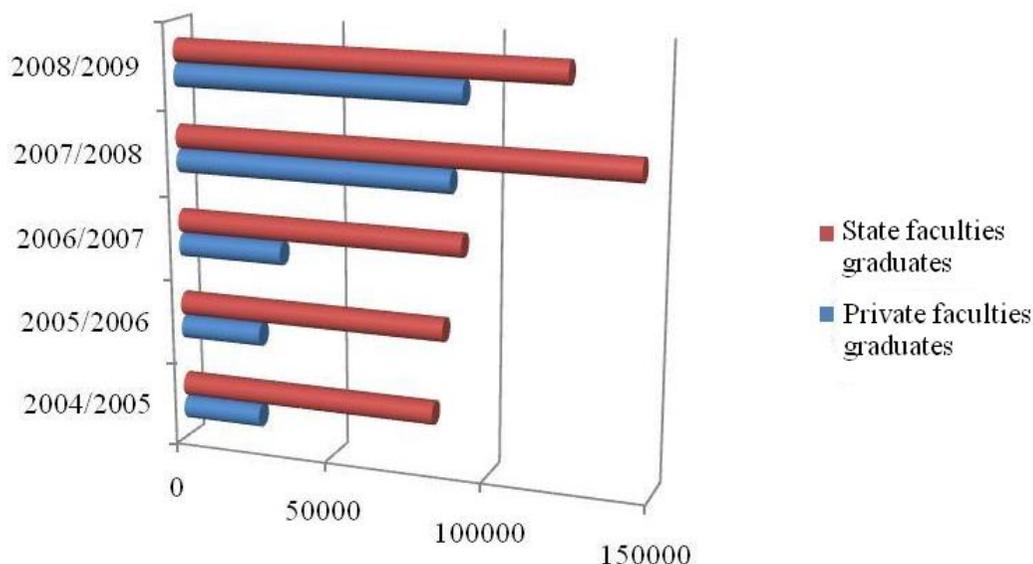


Fig. no. 3 The Evolution of Private and State Faculty Graduates Number
Source: Made by the author based on The Statistical Annuary of Romania, 2010, pp. 247

The number of a state faculty graduates increased from 80,000 in 2004 to 140,000 in 2007, but decreased in 2008 (Table no. 2). The biggest increase was registered in 2007, when the number of graduates increased by 50,000 persons compared with 2006. In 2008, the number of a state faculty graduates decreased at both the state faculties, and the private ones, but in a higher proportion in the first compared to the latter ones.

Table no. 2. The Evolution of the Graduates Number (persons)

	2004/2005	2005/2006	2006/2007	2007/2008	2008/2009
Private faculties graduates	25736	26336	33839	88028	91803
State faculties graduates	82739	85908	91660	144857	123023

Source: The Statistical Annuary of Romania, 2005-2010

The structure by profiles of students (Table no. 3) was influenced by the requirements of the labour force market. Therefore, in the last years, the weight of students in the technical education decreased, the weight of students in the profiles increasing, both among women, and among men.

Table no. 3. The Graduates Structure by Profiles

	Private faculties					State faculties				
	2004/2005	2005/2006	2006/2007	2007/2008	2008/2009	2004/2004	2005/2006	2006/2007	2007/2008	2008/2009
Technical	991	663	1116	1228	3194	23063	23942	23642	22721	46148
Medical-	362	408	599	622	933	6055	5884	6034	5974	7189

	Private faculties					State faculties				
	2004/ 2005	2005/ 2006	2006/ 2007	2007/ 2008	2008/ 2009	2004/ 2004	2005/ 2006	2006/ 2007	2007/ 2008	2008/ 2009
pharmaceutical										
Economic sciences	12620	12846	14203	45598	39979	17750	19252	23008	46246	27441
Law	6640	5810	7550	10391	17621	4258	4365	5018	4067	3797
University-pedagogical	5021	6247	9998	29382	29540	30114	30256	32095	62736	36600
Artistic	102	362	373	807	536	1481	2209	1863	3073	1848

Source: The *Statistical Annuary of Romania, 2005-2010*

The change in the graduates' structure by profiles was mostly determined by their desire to earn more or by the possibility of obtaining a higher wage in a shorter period of time.

4. Conclusions

In the context of the European single market, where information, capitals, persons, goods and services circulate free and fast, where economic rationality is different at the global level from the national one, radical mutations occur in each member state's strategy with regard to the educational system. Therefore, the Romanian educational system, especially the Romanian higher education must correlate the graduates number with the Romanian and EU labour force requirements, and take into account the necessities imposed by the participation at international competition. On the other hand, a country's economic and social development level depends very much on its citizens' educational level, especially in nowadays knowledge-based society, which is a society of lifelong learning.

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TRUST – A FACTOR OF PRODUCTION

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The economic activity is more and more influenced by the condition and the evolution of some immaterial and non-financial elements which exist in a firm or a country. One of these elements - information - has unanimously been accepted as the 4th production factor. In this paper I try to demonstrate that trust too, has to be accepted as a production factor. Especially as it fulfils the fundamental conditions for this to happen : it is infinitely divisible and homogeneous and, thus, its marginal product can be calculated. In nowadays world, characterized by the apparently unstoppable expansion of the cruel individualism and of market fundamentalism, which have undermined the trust in the success of private initiative, producers increasingly need community, need another mode of involvement of the state in economy and they need another way of relating to each other. The costs resulting from the diminishing of trust have become so significant that their transformation into income is necessary, if we succeed in basing ourselves on trust in the economic process.

The 2007-2010 economic-financial crisis was determined by events which had taken occurred in the perimeter of trust. It has been explicitly stated that the loss of trust in the financial institutions and in the main instruments used by them is the decisive cause of this crisis. If we corroborate the level of approaching this problem and we refer to the situation in Romania, we can state that it has become common the fact that the main reason of the dramatic decrease of the economic indicators in the time interval mentioned previously, and the agony that this field is currently facing, is the loss of trust in the success of every business exclusively underpinned on economic reasons. Especially the change of the Fiscal Code, of the interest rate, of the employees and employers' behavior and orientation, including of those in the central bodies, have undermined the trust in the possibilities of reaching the objectives stipulated.

We appreciate that such a multi-factor approach is rational, taking into consideration the case in discussion, of the collapse of trust, for the economic activity is an integrant part of social life. As such, it can take place only if those carrying it out comply with numerous norms, rules, moral obligations, and social habits. In doing this, they get to support each other to such an extent so that they become a community based on mutual trust. Thus, they acquire, through informal impulses, the capacity to be part of groups and organizations and its result consist in improving the measured performance, obtained as a result of common work. The existence of group communities, without which there cannot be modern production, is unimaginable without a certain level of trust. Hence the need to obtain the production demanded by the market, in the conditions of efficiency imposed by it, makes it necessary to engage some expenses to cultivate and maintain the trust among the producers and between these and the consumers.

Due to these two reasons, one referring to the economic situation in our country and the other of scientific type, we believe that the problem of trust in the parts associated in performing the productive activity must be reconsidered in order to be rationally underpinned from a utilitarian perspective.

The premises to start from in the attempt to make another localization and disclosure of the role of trust in the realization of the economic activity are:

1. The way in which the realization of the economic activity is perceived and, then, the way in which this is actually realized carries the stamp of ideology and of the system of organization predominant in a country at a particular moment. Very rarely, there are cases when the economy and social life evaluate in different directions. The trust in the social players occurs when in a

community there is and manifests in space common moral values which can generate the expansion of the entire system of a rigorous and honest behavior. In economy, there is the need for a written moral code and for an unwritten moral code to stimulate loyalty, solidarity and, in the end, the trust among the common employees, in the managers, in the employees having supply – sales tasks etc., without which the development of the firms cannot be ensured. By wording this premise, one should not understand that we want to place the heaviest part of responsibility on the realization and manifestation of trust on the shoulders of institutions and markets. They interfere with the productive systems only to assess the effects that the trust carrying out the economic functions generated. The business community does count so much on rules and laws but a series of ethical habits and moral obligations mutually assumed by the members of a work staff. The content, the formulation, and pursuit of the way to acquire and apply these rules, norms, and habits have made the members of this community to trust in each other.

2. It is known that the competitive relationships in a market economy require firms to conduct a more active performance to diversify and modify their offers in terms of price level, quality, and performance of marketed products and services.

When there is no belief that these attributes of certain commodities available in stock and points of sale, could actually meet the projected needs of buyers, or that they contribute to the strengthening of the supposition that the act of exchange is not carried out in two parts mutually beneficial terms, those products will not sell, or this will be done with great difficulty. Competition will never be able to act as a strong motivational stimulus of development even when economic agents will appreciate that their freedom is in decline, when primary psychological rewards are felt unreasonably low, or when private information is distributed subjectively so that it creates unfair competitive advantages. We can say that today the ability to compete on the domestic and the foreign market of a firm and of a national economy is conditioned by a universal principle: high level of trust that prevails in that company. Economic counterperformances follow logically from the lack of confidence.

3. Capital, with its widely recognized hypostasis is the main component of production forces. It appears as a sum of money, means of production or as human capital. Today the relative importance of buildings, equipment, money has declined, whereas that of people skills and knowledge has increased. and pricepii people. Its latest hypostasis, also called human capital, includes as well, the ability of employees to work together in groups and organizations, not only the one to know how to operate the mechanisms, documents or securities. The employees' ability to associate depends on the extent to which they and their inclusive communities agree to conduct their business following certain rules and values and, consequently they get to be willing to subordinate individual interests to the general ones. Without such rules, some unwritten, like loyalty, honesty, responsibility, ability to inspire trust, people can not work together in a firm, acceptable in terms of efficiency. Without such values, the work of an employee becomes too costly because it imposes a requirement that they be replaced with formal laws and rules to be drafted, negotiated, adopted, required, sometimes forcefully. And when something like that cannot be obtained, it is substituted with ever increasingly large and comprehensive commercial contracts or with the sacrificed advantage to achieve production in large units, in favor of family or small business.

Thus, for the individual to have a genuine labour force in the circumstances of the current competition, he must also fulfil certain cultural and moral requirements, besides the professional ones. If the employee does this, he proves more reliable, and manufacturers can adopt new, more flexible forms of firms' organization, such as outsourcing, delegating responsibility to lower levels of the hierarchy, focusing attention towards the needs of the group that produces the goods or services in the firm. That is why in modern society, with the technical and technological model specific to present times, no one should dictate a unique form of organization of production, nor

be deprived of a high degree of trust and solidarity. These psycho-social attributes respond to the more general need to increase economic efficiency, which is imposed by the world population's growing number and by the shortage of energy and material resources existing on the planet. However, to properly exploit such resources is harder when employees feel a discomfort, an acute vexation, when they lack confidence in the rules, regulations, habits and moral obligations. Based on the aforementioned concepts, we strongly assert the belief that in today's circumstances the trust is an essential feature of private employment as a component of production forces. At the same time the emphasis and manifestation of trust require an exchange of information between the participants to the productive act. However, this human feature cannot be reduced to simple information, nor to the technical means it is transmitted through, including those relating to the fundamentals of certain employees' personalities.

Trust is necessary so that three of the four components of the productive forces could manifest themselves, namely: the element of capital, the labour force and the information. However, we believe that trust is a factor of production distinct from the four recognized, as the relationship between it and the possibilities of expression of the other three mentioned above is a one-to-one. Placing it on such a position reveals the great importance it has in reality. Moreover, the trust meets an undeniable economic function, as shown by the special relationship it has with the product of work. In its presence, the economic, financial and relational performances of the firm are growing while, if there is no trust, its income would rather be redistributed between the members of the firm and the members of society, than be increased by creating new value by working. In the absence of moral commandments, such as justice, honour, or faith, reason gives way to material pleasures so that the employees get to show self-cantered behaviour, to maximize their individual utility at the expense of the pursuit of group objectives.

The consideration of trust as an independent production factor can also be validated from a scientific point of view because it fulfills basic conditions in order to be appreciated so. Trust has an important economic value that is measured, divided, and homogenous. Thus, we can calculate its marginal product.

Although it has these obvious characteristics, we underline the fact that trust is a supplementary condition for increasing the economic efficiency besides the things obtained as a result of exterior coercions such as contracts or the provisions of commercial law. In case of studying them deeper, we will come to the conclusion that these are also sustained by trust, if not directly, then through other means, such as insurance policies, derivative securities or securitization of certain securities or transactions that allow hedging. The marginal product can be quantified by using the so-called transaction costs that are done when there is a lack of confidence in the manufacturing firms. The identifying of the appropriate manufacturer or vendor, as needed, the drawing up of a contract for the given situation, its negotiation and its implementation, the receiving and the quality inspection, and so on, generate higher or smaller costs depending on the extent to which the parties believe in mutual honesty. We must not omit the fact that in the situation where trust prevails, the parties do not think of short-term profit, because they are aware of the fact that recording a deficit during a certain period will be compensated later.

DETERMINANTS OF COMMUNITY PARTICIPATION IN ORADEA

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The present paper is part of the research of the PhD thesis made by the author, having the following title: Community Participation in Oradea, registered at the University of Oradea - Faculty of Social and Human Sciences. The general objectives of the paper are the explanation of different types of citizens' involvement in the community life which they belong to, the investigation of the existing relationships between different types of participation and the identification of some social involvement stimulating mechanisms.

The citizens' political and civil participation, social responsibility, community spirit, civic activism together with other concepts from the civil society's rhetoric entered, together with intensifying the efforts for adhering to the European Community, the agenda of public debates, being the subject of numerous studies performed in this field. The need for a strong civic society, with interested and involved citizens in the life of the community which they belong to for social and economical development belong to the same discourse of the strong democratic society, being contended in the specialty literature, starting with Toqueville, Almond and Verba, to Putnam and many others. In parallel to the civil society's rhetoric and the analysis coming from this direction, are the studies and theories of community development, which on one side are based on development policies, regulations, institutional framework of development, but contain, mostly on the level of implementation of methodologies and aspects of citizens' involvement in evaluating the community problems, the deciding process in the actual implementation of solutions.

The present paper subscribes to the efforts of determining the factors which can increase the implication rates in the community life of the Romanians, having as an effect the production of different types of collective goods. Based on data obtained with the CEEX research, coordinated by Adrian Hatos, "Leaders, Participants and Viewers. Determiners of community participation in the urban Romania". The tested hypotheses in the research part, based on the results of different studies and theoretic approaches, derive from the general question of the paper: which are the factors that determine the community participation of the people living in Oradea. Thus, the participation variation is verified by: gender, age, social status, social capital, civic competence, leadership experience, participation opportunities. The main results suggest that community participation is explained by civic competence, well-being, bridging social capital, gender and age.

Key words: community participation, community development, civic activism.

JEL codes: D17, H41

1. Theoretical framework, work hypotheses

Regarding participation types in community, we can identify more types which sometimes, just like Marinetto (2003) and Kim and Bearman (1997) pointed out, depend, besides the citizens' motivations, also on the political or social environment in which participation manifests and on the political definition given to participation. These forms can cover a large spectrum of actions, from protesting the authorities' decisions, to participation at different public debates, associative participation for the community, volunteer work or helping actions or contributions to underprivileged categories. Thus, we can say that any action of the individuals for producing desirable collective goods is community participation and thus civic participation is a particular type of this kind of participation.

Following one of Marc Morje Howard's (2002) argument, developed by Hatos (2008), we consider that civic participation in post-communist countries is lower compared to Western countries because people here are skeptical when it comes to involvement in formal non-governmental organization, for different reasons (the memory of communist organizations, considering these NGOs as part of the western hegemonic system, inability of these organizations to meet the needs of the citizens or reduced access to these). Nevertheless, it is possible for the Romanians to avoid involvement in the classical organizations of the civil society, but to act through family networks or non-formal frameworks (like neighborhood) in ways that produce collective goods. This argument is supported by the data of our research, participation rates at different community activities being higher than belonging to an NGO, but this data has to be analyzed carefully because there is no direct correspondence between the two types of participation. A separate section from the analysis is going to be dedicated to testing hypotheses. One of these analysis highlights the civil society's limits and explains them through the low levels of social trust. Thus, the connections are made between social trust and low levels of civic participation, NGO memberships, weak social connections, corruption (Uslaner: 2003), (Badescu: 2002), (Howard: 2003). The lack of involvement is influenced by the lack of trust (both institutional and general) which was weakened by the communist party (Hann: 1996). The same arguments are used for explaining the decline of civic involvement from the western societies, even if the sources for mistrust are different (Putman: 2000).

Factors that explain low rates of participation in Romania are education, profession, gender, home environment, the participant's profile being a young male, from an urban environment, educated with previous experience in civic participation (CSDF: 2003). Previous involvement in organizations was analyzed in a different manner by Hatos (2008), the author analyzing the relationship between the present civic involvement and the activism in the communist period, demonstrating the existence of a positive relationship argued with the fact that the previous activism represented both a learning context of the abilities necessary for the success of the action and a framework for developing a specific social identity (Dodescu and Hatos: 2004).

Civic participation refers to the individual's action social oriented to the production of a collective good (Dodescu, Hatos, 2004). The problem of civic participation is found in the civil society's topic, complementary to the political participation of the citizens. It is usually measured (Badescu 2001, Uslaner 2003) by the participation and involvement rated in the classical types of civil society: non-governmental organizations. Association rates are the most frequently used indicators of civil participation, even if in order to produce collective goods there can be other involvement mechanisms as well. Collective actions, social movements and grass-root movements are aspects of the same problem, but are less operational. Community participation is a concept closer to the problem studied in this thesis, by integrating also actions of the social actors in the community to which they belong in order to solve some common problems.

D. Sandu (2005) defines community participation as being the process of involvement of the members of a community in actions "that follow the fulfilling of certain local needs, predominantly local and public or group type" (p.43). This participation is predominantly voluntary, but it can also be involuntary when it is not known who is going to benefit from this action or when there are some pressures to stimulate participation. Iuliana Precupetu (2003) analyzes both theoretically and by using empirical data, the connection between social participation, social capital and poverty. According to literature, the author presents a few factors that influence participation: civic competence (seen as the individuals' perception regarding their capacity of influencing the decisions of those in charge) and political involvement, cultural behavior, access to public facilities (well-being indexes), satisfaction regarding the possibility to be part of the social life, quality of the social and political environment, satisfaction regarding the possibility to be part of the decision making process at different levels and information.

Another factor that was highlighted by A. Hatos (2008) as having a role in explaining community participation is having a leading position, both before the revolution and after, both in the political hierarchy and the one from the field of work. By comparison analysis of the average scores of individual participation and having different leading positions, the author demonstrates the positive relationships between these, highlighting the strong connection between having a leading position by the members of the family for individual participation.

These relationships are tested in the present analysis, explaining the community participation rates of the people living in Oradea according to the available data, verifying the following research hypotheses: [1] A. Young people are going to participate more than older people; B. Retired people are going to participate more than mature people: they have more time, but may have problems that can affect their participation; [2] People with higher social status are going to participate more than those with a lower status. The status is going to be analyzed in two dimensions: educational level (number of completed study years) and well-being indexes (incomes per home, goods in home); [3] As social capital rises, community participation rises as well - social capital is measured according to its two distinct dimensions: belonging to social networks (intensity of the networks: time spent with friends and their density: number of friends) but also social trust; [4] Civic competence or the sense of personal efficiency raises the chances of participation. Civic competence is measure through the answers to the questions: to what degree do you think you can influence de decisions from the country of town); [5] They had leading positions that worked either as contexts for learning abilities and knowledges needed for a successful participation, or as instances for developing a specific social identity; [6] Participation is influenced by the context in which it occurs: the lack of contexts/ opportunities to participate has a inhibitive effect on it.

2. Data and methods

For the second stage of the CEEX project presented in the introductory section questionnaires were applied to a random sample of 461 people from various areas of the city of Oradea, in October 2007. The sample includes 50% men and 50% women, aged between 18 and 86 with a rather equal distribution according to category of age.

2. a. The dependent variable:

In our research community participation has been recorded through questions regarding participation rates to various activities on the level of neighborhood, as shown in chart 1.

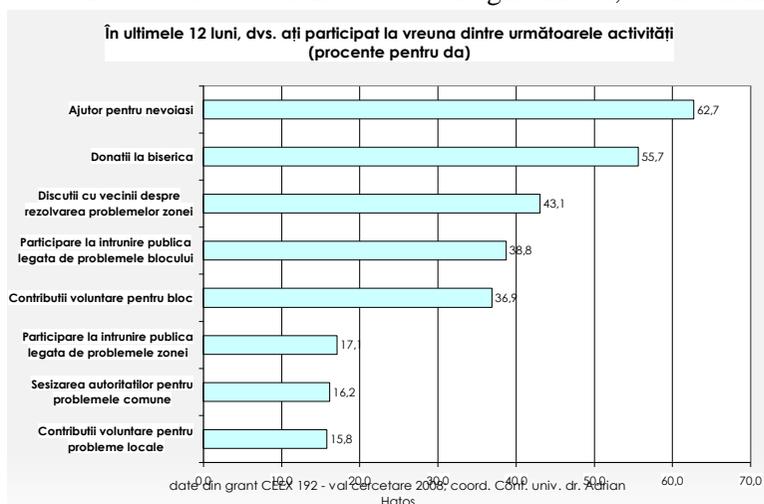


Chart no. 1 – Community participation forms and rates in Oradea

In order to analyze the determinants of community participation a summative scale has been created, based on these variables ($\alpha > .811$), with the minimal value of 0 and a maximal value of 8 activities for the respondents to participate, the average being 2.8.

2.b. Independent variables

The gender_of respondents is introduced in the analysis as a dummy variable with 1 as value for males. Age is a continuous variable measured used as such in the analysis.

Social status is measured on two dimensions: level of education measured in years of study on one hand and household assets on the other. The variable referring to years of study completed is the outcome of the recodification of the categorical variable 'last school the respondent graduated from', thus resulting the scale variable used. As for the economical status we have chosen as explanatory variable household goods that we consider relevant to exemplify household welfare in time. Personal income or income per household, beyond the potential errors resulting from calculations made in Ron or Rol (the questionnaire was applied in the transition period between the two systems of reference) is more variable in time and has a higher non response rate. In order to introduce household assets in the analysis we created as summative scale of assets.

Social capital was included in the analysis on several distinct dimensions: intensity of networks, their density and generalized trust. The intensity of networks to which an individual belongs is calculated by answers to the question: how much time do you spend with your friends with the following potential responses: weekly, a few times per month, a few times per year, no time at all that has been turned into dummy variables keeping the no time at all category as reference category. Density of networks is calculated through a scale of the extensive social capital built as an average value of responses to three questions: 'how many friends do you have?', 'how many friends do you have that you can borrow a small amount of money from?' and 'how many friends do you have that you can borrow a large amount of money from?'.

Personal effectiveness- or the civic competence was introduced in the analysis as an average scale of answers to the questions: 'To what degree do you think that people like you can influence important decisions regarding: the community/ the entire country?'. Positions of management were followed through responses to a set of 14 items for which a summative scale was designed by adding up the 'yes' answers after a dichotic recodification of variables.

	N	Minimum	Maximum	Average	Std. Dev.
age	376	18,00	86,00	42,5452	16,43470
most recent school graduated from measured in years of study	384	,00	8,00	4,5703	1,78191
scala_bun	448	,00	12,00	8,1429	2,74610
scale_eficacitate	431	1,00	4,00	1,7645	,74451
capitalso_dens	336	,00	28,67	4,8482	4,16796
free time spent with friends weekly	461	,00	1,00	48,37%	,50028
free time spent once or twice a month	461	,00	1,00	31,24%	,46396
free time spent once or twice per year	461	,00	1,00	11,06%	,31401
scala_inc_generala	430	,00	4,00	2,2312	,69982
Scala_sefie	449	,00	11,00	1,5924	2,13099
Valid N (listwise)	264				

Chart no 1. Description of independent variables

3. Analyses

3.a. The effect of context on community participation

One of the aspects that have been traced in the analyses was the actual participation according to opportunities available for each individual. This was possible due to the fact that one of the response options to the question was: *not applicable*. To this purpose two distinct scales were created: one of absolute participation and one of relative participation, the latter taking into

account situations where participation was not applicable. For absolute participation ($\alpha > .811$) we have built a summative scale of the cases in which participation to one of the activities in the list of variables was reported. The average value of the scale is 2.81 where a min. of 0 and a max. of 8 activities to participate in, with left inclination and a skewness value of 0.232.

For the scale of relative participation we have eliminated those cases where 'not applicable' was reported for each action. The difference between the distribution of relative participation and that of absolute participation is rather similar, with an average of 3.9 and a skewness value of 0.231. When comparing the averages of the two variables, there is a significant difference between them to be observed ($t = -29.61$, $p = 0.00$). Moreover, the dispersed distribution of the responses on this second scale makes it less suitable for future analyses, therefore it will not be used further here.

As a conclusion of the comparison between absolute and relative participation, it may be said that the people of Oradea participate in less than half (39.91%) of the activities they have the opportunity to participate so that the arguments that explain the lack of community activism through the absence of contexts in which citizens can get involved can be refuted to some extent. This is indicative only of the fact that the explanation of the low rate of community participation needs to be sought elsewhere and does not dismiss the creation of contexts for activism, at least as context for acquiring the knowledge and the abilities required by a rather successful participation. Consequently, for the available data, we dismiss *hypothesis no. 8* which maintains that community participation varies according to the context that enables or inhibits it.

3.b. Determinants of community participation

In this section, through multiple regression analysis we will outline the factors that explain community participation and the level to which they contribute to these explanations according to the formulated theoretical hypotheses.

COMMUNITY PARTICIPATION ABSOLUTE SCORE	B	S.E.	Beta
(Constant)	,280	,909	
gender of dummy respondent – male	-,688	,229	-,175
age of respondent	,004	,009	,030
most recent school graduated from measured in years of study	-,026	,071	-,023
scale of household assets	,221	,051	,283
scale of personal efficiency/ civic competence	,460	,165	,165
social capital_density	,019	,029	,040
free time spent with friends weekly	-1,180	,512	-,300
free time spent with friends one or twice a month	-,777	,498	-,187
free time spent with friends one or twice per year	-,116	,635	-,014
scale of generalized social trust	,288	,182	,094
absolute scale of holding a management position	,261	,062	,271
<i>Adj. R</i>	<i>0.188</i>		

** coefficients in bold represent significant effects for $\alpha < .05$

Chart no. 2. Regression chart for the community participation dependent variable.

The model explains 18% of the variation of community participation as absolute score. The gender of subjects, as well as their age, are predictors of community participation but contrary to hypotheses formulated based on other studies on the same topic. On the other hand, according to our data, women participate more, in other words, the female gender is a predictor of participation. In this case it is possible that the difference is in the distinct forms of participation analyzed: men are oriented towards other types of actions including civic and associative ones, while women are involved more in activities closer to the household.

In this model one of the factors that explains most of the variation is represented by the scale of goods, which is thus a good predictor of community participation in the sense that an increased level of endowment of the household enhances the increase of community participation.

Nevertheless, the second indicator of social status, education does not influence participation in the case of our sample. This conclusion points at the social structure of the current urban Romania where cultural and financial capital are not facets of the social status: there are wealthy people with no education, as well as poor people with education and as far as community participation is concerned financial aspects appears to be more important than the educational. Perceived effectiveness is also a factor that explains participation: the more a person feels that he/she can influence decision, the more likely is the person to participate in actions on the level of community. Here we can argue that strategies that stress *empowerment* have more chances to succeed, since the feeling of responsibility and that of effectiveness cumulated are important resources of community activism, as other studies have shown it (Dodescu, Hatos 2004). Also, our analyses confirm the significant role of social capital in explaining community participation: people who are part of dense social networks (have a large number of friends) participate more in the solving community problems. However, the intensity of relations (meeting friends on a weekly or monthly basis) has a negative effect on participation, thus supporting the theories of weak relations. Generalized social trust is not a predictor of community participation. Another factor that proves to be relevant in explaining community participation is represented by the issue of holding management positions, either in the professional or in the political life, before and after 1998. In other words, people who have or had management positions participate more in actions on the level of neighborhood. This is indicative of the fact that either acquiring the knowledge and the abilities of a successful participation or the creation of a role identity specific to social activists are important mechanisms in promoting participation.

4. Conclusions and discussions regarding community participation

As a conclusion, it can be said that as far as community participation in Oradea is concerned, the following hypotheses are confirmed or modified:

- People from wealthier social categories have a higher rate of participation;
- Density of social networks increases participation while their intensity decreases it;
- Women participate more in community actions than men;
- Older people participate more than young people but participation decreases with age;
- The level of education does not explain community participation;
- Generalized social trust does not explain community participation.

Generally speaking we may say that these results point to the fact that it is possible that on the level of the urban communities in Romania community participation has a distinct profile than civic participation traditionally measured as associative participation in NGOs. This could be the reason for not finding support for some of the tested hypotheses as they were formulated on the basis of analysis of associative participation. Consequently, we formulate the hypothesis that will be tested in the following sections, namely that in terms of adherents, community participation is highly different from associative participation.

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THE FREEDOMS OF MOVEMENT OF THE SINGLE MARKET

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The European Single Market implies not only the free movement of goods and services, but also the free movement of production factors (the capital and the labor force). The liberalization of goods and services and of production factors movement has determined, on the short term, the appearance of some structural and specialization adjustment processes within the member countries, and on the long term a more efficient allocation of the production factors, an improvement of labor productivity and positive effects in the field of labor force employment. According to the neoclassical theory, the labor force migrates from regions with low wages and low profit rates, to regions having high wages and high profit rate. Thus, the production factors are used in a more productive way. According to this theory, the factors mobility contributes to the equalization of the wages and to a better factors allocation. Issues such as structural funds, persons' freedom of movement, convergence could be turned into advantages by any member state, and especially by a new member state. From an economic perspective, the causes of labor force mobility, as a production factor, are: the price differences (wage differences, profit rates differences, interest rates differences) – according to neoclassical theory; income difference, meaning saving excess or insufficiency for the capital, according to Keynes approach; differences in the level of economic development, determining unequal changes, according to the monetarists. Romania has become a European Union member at January, the 1st, 2007. The accession road has been a long one, full of challenges, issues, but also satisfactions. The 1st of January has not been the end of a process, but the beginning of a new period for Romania's present history. The author will try to emphasize the freedoms of movement of the Single Market. The humanitarian reasons also determine the migration of the population; these are the refugees, the asylum solicitors, the persons having temporary protection or persons accepted for other humanitarian reasons.

Key words: Economic Integration, Models of Trade with Imperfect Competition, Labor Market Interactions, freedom, movement.

Jel: F12, F15, F16

1. Introduction

From an economic perspective, the causes of labor force mobility, as a production factor, are: the price differences (wage differences, profit rates differences, interest rates differences) – according to neoclassical theory; income difference, meaning saving excess or insufficiency for the capital, according to Keynes approach; differences in the level of economic development, determining unequal changes, according to the monetarists. According to the neoclassical theory, the labor force migrates from regions with low wages and low profit rates, to regions having high wages and high profit rate. Thus, the production factors are used in a more productive way. According to this theory, the factors mobility contributes to the equalization of the wages and to a better factors allocation.

The European Single Market implies not only the free movement of goods and services, but also the free movement of production factors (the capital and the labor force). The liberalization of goods and services and of production factors movement has determined, on the short term, the appearance of some structural and specialization adjustment processes within the member countries, and on the long term a more efficient allocation of the production factors, an

improvement of labor productivity and positive effects in the field of labor force employment (Wallace H., Wallace W. and Pollack M. 2005:201).

Through labor force freedom of movement, a more efficient allocation of this production factor is pursued. Among young people, we can talk about migration in the purpose of education and professional preparation: students or persons in professional preparation. Their migration should be temporary.

Among the migrants, we can also find those working in another country, being immigrant workers or international civilian servants. Other reasons for migration are the reunification and the formation of families, and also the freedom of establishment, in order to work, based on family connections, ethnic origin, entrepreneurs and investors, or pensioners. The humanitarian reasons also determine the migration of the population; these are the refugees, the asylum solicitors, the persons having temporary protection or persons accepted for other humanitarian reasons.

2. The labor force freedom of movement for the members

The Schengen Area: in order to stimulate the persons' freedom of movement, in June 1985 France, Germany and the Benelux countries signed the Schengen agreement. Italy joined in 1990, Spain and Portugal in 1991, Greece in 1992, followed by Austria, Finland and Denmark. The United Kingdom, Ireland and Sweden didn't sign this agreement. According to the Schengen agreement, the control to the internal frontiers of the EU are rarefied and then eliminated, while the controls to the external frontiers are intensified. There is a common policy concerning the visas granting, and the member states cooperate in the judicial and custom field. The labor force freedom of movement implies the following four essential rights: to present itself to a contest in another member state, to be free to move on the territory of another member state in this purpose, to be able to remain on the territory of another member state in case of employment, to be able to definitively live on the territory of another member state. As for liberal professions, they are free to settle down on the territory of any member state.

On December the 21st, 2007, the Schengen agreement was extended on the Czech Republic, Estonia, Hungary, Lithuania, Latvia, Malta, Poland, Slovakia and Slovenia. Romania and Bulgaria still have a lot to do to answer the security criteria of the European Union. Most probably, the two countries will join the Schengen space in 2011. Let's see now some of the consequences of labor force freedom of movement upon the Romanian labor market (Wallace H., Wallace W. and Pollack M. 2005:96).

The changes in December 1989 have brought more simple formalities, in order to obtain a visa for a West European country. Also, at the beginning of the 90, Romania has registered a strong emigration of German ethnics. Thus, from 1990 until 2002, the emigration, as well as the negative natural rise, contributed to the diminishing of Romania's population by 1 million persons, from 23 million inhabitants to 22 million inhabitants. Unfortunately, this movement has continued. The elimination of visas from January the 1st 2002, in the middle of Romania's negotiations for the EU accession, has determined an increase of the number of emigrants, phenomenon which has amplified after January the 1st 2007, when Romania has joined the EU. At this moment, it is estimated that in Romania live less than 20 million people (probably, about 18 million), while more than 2 million people work abroad (about 1 million Romanians are in Italy, 1 million in Spain, and other in Germany, France or the UK). We must start by saying that the Romanians' emigration, in order to find a better life, did not start in 2007, once the Romania has joined the European Union, nor in 2002, when the Romanians did no longer needed visas for the Schengen states. Even before 1989, there was an emigration movement, both legal and illegal, but having a reduce amplitude.

Attracted by big salaries and a better life, many Romanians, young for their majority, have chosen to leave their country and work abroad. They sent important amounts of money to their

relatives in Romania, allowing them a decent living. The Romanians work especially in constructions and agriculture (men), or as housekeepers and in agriculture (women). It is estimated that in agriculture, many of them work illegally. In 2005, the money sent back home by the Romanians living and working abroad has been of 4.14 billion Euros (5.6% of Romania's GDP). The Romania's spectacular economic growth of the last years has been supported, partially, by this important amount of money, sent home by the Romanians working abroad.

The consequences of emigration, for the destination countries, have been rather positive: the EU GDP has raised by 0.17% on the short term and by 0.28% on the long term; the inflationist pressures have diminished in the destination countries; the wages have dropped by only 0.08% due to immigration, while the unemployment has raised by only 0.04% (Sirghi si Vădăsan, 2010:19-25). In the departure countries, the consequences are more controversial on the one hand, the unemployment rate has diminished (only 4.1% in 2008), the pressure on the state budget has diminished as well; the emigration has allowed Romania, for instance, to avoid an economic and social crisis, of a huge amplitude, which could have endangered our integration calendar; the money sent back home have encouraged the consumption, as well as the real-estate sector, both contributing decisively to Romania's economic growth. But on the other hand, Romania is confronted to a lake of qualified labor force: 100 000 work places have not been occupied in 2008, and it is estimated that until 2013, this labor force deficit will reach 300 000 persons.

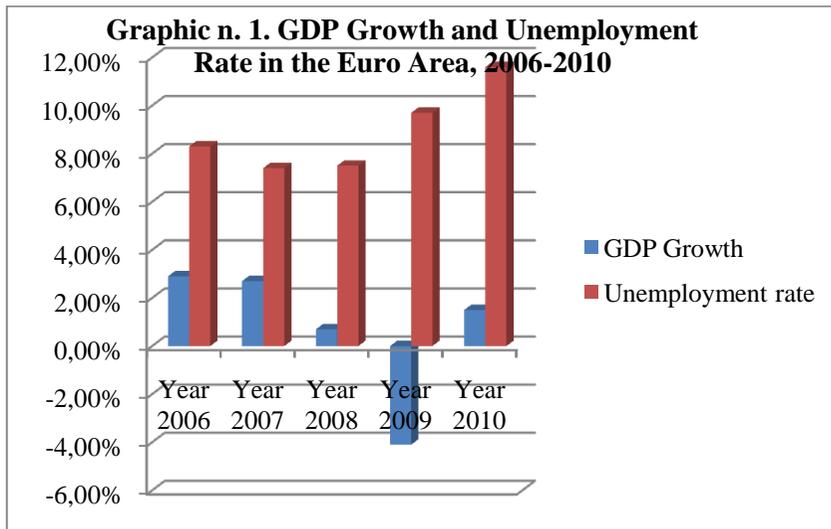
In the present, Romania is the country where investors are encountering the biggest difficulties in finding the needed personnel, with the needed qualifications. As a consequence, many investors have brought foreign labor force: only in 2008, 65 000 work licenses have been granted. Many of those workers come from China, Bangladesh, Republic of Moldavia or Ukraine.

After the integration in the European Union, 16 countries have forbidden Romanians' accession to their labor markets. Since January the 1st, 2009, 5 countries have eliminated these restrictions. By 2013, all EU countries will have to eliminate these restrictions. In this moment, Romanians are free to work in the following countries: Estonia, Finland, Poland, Slovakia, Czech Republic, Cyprus, Sweden, Slovenia, Latvia, Lithuania, Bulgaria, Spain, Denmark, Greece, Hungary and Portugal, while in the following countries there are still restrictions: Belgium (until 2011), Ireland (until 2012), Netherland (until July the 1st 2009), the United Kingdom (until 2011), Germany, France, Austria, Italy, Luxembourg, Malta (until 2013). The member states of European Economic Area (Liechtenstein, Island and Norway) have also maintained the restrictions until 2013.

An important step was the Referendum held in Switzerland, on February the 8th 2009. According to the result, and in spite of a very negative campaign, more than 60% of the voters were in favor of prolongation and extension of the Agreements with the EU, regarding the freedom of movement (including the free movement of Romanian and Bulgarian labor force). Following this positive result, in 7, maximum 10 years, Switzerland will eliminate any restriction.

The present crisis resembles to its predecessor, among other things, by the state interventionism, through money infusions, and through nationalisations.

Concerning the present crisis, the EU, are strongly affected. As one can see in graphic number 1, in the year 2009, the economic growth for both the Euro area negative (-4.1%), while the unemployment rate is sharply growing, to 9.7% .



Source: www.anofm.ro, www.insse.ro, ec.europa.eu/eurostat/

The forecast for 2010 is slightly optimistic concerning the GDP growth rate (+1.5%), but the unemployment rate will continue to grow, to more than 10% for both Euro area. The situation is worsening, and nobody can tell for sure when exactly the crisis will reach its end.

Which are the effects of Romanians' dismissing abroad? On the one hand, the labor force shortage will be reduced; the return of qualified labor force is a gain, but only on the long term. On the other hand, under the conditions of the resent crisis, and taking into consideration unemployment rise in Romania, their return will most probably represent, on the short term, a serious social issue, contributing to an even more higher unemployment rate. Also, the money delivery will decrease, by even 50%, making more difficult the life of those remained in Romania.

The global crisis has affected the EU, as well as Romania. On the Romanian labor market, since December 2008, one has registered an increasing unemployment rate: 4.4% at the end of 2008, 4.9% in January 2009 and 5.3% in February 2009. By the end of 2009, in an optimistic anticipation, the unemployment rate will reach 5.5% (Sirghi și Vădăsan, 2010:18-19). But this is not the only problem Romania's labor market has to face this year. In 2008, some 100 000 Romanians working abroad have lost their jobs, and some more 30 000 Romanians will lose their jobs this year. However, only 14% of them have the intention to come back to Romania in 2009. 33% will remain for 2 to 5 more years abroad, 15% will come back only after 5 years, while 29% have no intention of coming back.

3. Conclusions

As we all know, the first right of the European citizen is to be able to travel, work and live anywhere on the territory of the European Union. The Maastricht Treaty has legitimated this right in the chapter referring to citizenship. The freedom of movement and the equality of treatment, by forbidding any restrictions regarding the labor force for the European citizens have created fear among the "old" members of the EU, concerning massive migratory labor force flows, from the East to the West, in search for better salaries and better working conditions. As a consequence, fearing a massive labor force migration, from East to West, separated agreements have been negotiated, regarding the labor force movement after each candidate country will access the EU, a certain period of transition having been asked in order to liberalize the labor force circulation.

We consider that, in order to achieve the Lisbon objectives, it is imperiously necessary to insure the European workers mobility: the geographic mobility, as well as the professional mobility (the flexicurity). The last barriers elimination out of the way of the labor force freedom of movement has a particular significance. A transnational and European social dialog is necessary. In this context, right insurance during the stage of professional transition and, consequently, the social rights portability are extremely important. This is why, the increase of workers mobility is requested, by improving the way the supplementary pension rights are being gained and kept, and the regulation appliance regarding the social security systems is finalized.

A fundamental priority for the European Union is the development of a European policy concerning migration, which should complete the member states respective policies. In this purpose, the EU aims the accomplishment of a European pact regarding migration and asylum. Such a pact would emphasize a consolidated common policy regarding migration related issues, based, among others, on a more sustained dialogue with the origin countries. The European Union considers as objective the legal migration rise, including the labor force migration, as well as the application of a co-development policy, reflected by specific projects and supported at the European level. In this sense, it is necessary to continue the progress regarding the migration global approach. The cooperation and political dialogue with all the origin and transit countries must be consolidated, and partnerships concerning the mobility, the circular migration and cooperation platforms for migration and development must be promoted. As a general conclusion, we can say that EU membership could be an opportunity, but it depends on each member state to take advantage of it. One must also continue the actions related to the policies plan concerning the legal migration. In this sense, the migrants' rights issues must be rapidly solved, as well as the conditions regarding the highly qualified workers' entrance and stay, the persons detached within the same enterprise, the remunerated persons on probation, the temporary workers. The transition periods, applied to the workers from the new member states, should be eliminated.

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IMPROVING THE ECONOMIC ACTIVITIES IN THE LESS FAVOURED AREAS OF ROMANIA

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This paper deals with finding solutions for improving the economic activities in Romania's undeveloped areas, which still represent a major problem for this country's economy. During 1999 and 2009, these areas were considered tax havens, due to some facilities accorded by the Government and the EU(headage compensatory allowances⁵³, tax deductions, non-refundable funds). Many had the opportunity to invest in those regions, but no positive effect was to be seen. Tulcea County(Danube Delta area), coal mine regions, rural areas and the North-East area(Suceava and Botoşani county) are considered to be Romania's less favoured areas.

Keywords: less favoured areas, non-refundable funds, tax havens, economic growth, economic activities,

JEL clasification: E60

Introduction

Nowadays, every less favoured area from Romania represents a major problem for regional development, having a negative impact on Romania's economy. It is proven that long-term growth strategies for less-favoured areas require especially the development of infrastructure and national institutions, which kept those areas backwards. Since 1999, open trade between countries has been considered to stimulate the economic growth, both at national and regional level. This growth was often suppose to trickle down to less favoured areas. In other words, this was considered a process whereby the economic gains from economic growth would pass down throughout the entire society, eventually giving rise to development.

People living in less-favoured areas represent around the globe 40% of the rural population, suffering from chronic poverty. In what Romania is concerned, a study from 2010 reveals that closely 33% of the population of Romania is living with less than 200 Euros a month.

Less-favoured areas are defined as „remote regions with limited natural resource base, where problemes of chronic poverty and resource degradation tend to be the same. In the same time these areas have a limited agriculture potential, with poor infrastructure and service suport”.

However, it is necessary to distinguish the concept of less-favoured area with development potential. This area would be an ideal place where investment especially in infrastructure and tourism can be productive and sustainable.

A large number of implementing directives comprise the current classification of the LFA of each European Member State into three types:

-*Mountain areas*(rural areas around the Carpathian Mountains) where altitude, climate and slopes, reduce the chance of investments. The major problem for this areas still represents the process of deforestation, the lack of mountain resorts, and the lack of infrastructure.

-LFAs which are marked by poor soil conditions(especially low agricultural productivity), low population densities or even depopulation tendencies. In Romania Tulcea county(Danube Delta

⁵³ The objective of these schemes is to provide a reasonable level of income for farmers where natural production conditions are least favourable so as to conserve the countryside by the prevention of further depopulation of rural areas. Compensatory allowances are payable to farmers for the keeping of cattle, sheep and goats. (www.europa.eu)

area) could be considered an area with a low rate of investments, low soil productivity mainly because the Danube.

-LFAs which are related to small areas with specific handicaps relating to the environment, landscape development, low agricultural activity, low tourism development. This area in Romania may be found in the North-East of the territory, including Botoşani and Suceava county. This area represents a major undeveloped region of Romania, mainly due to migration to other countries or even in more developed areas of Romania.

To find solutions in order to develop the less favoured areas, some objectives must be established: finding an economic balance between regions, finding new ways to attract new investors, developing agriculture, industry and especially tourism to enhance the value of the local resources, inforce the cooperation between the regional areas.

Two important elements always play an important role for less-favoured areas: defected political institutions and poor infrastructure (poor infrastructure often implies a long transport duration or difficult communication between a LFA and other regions). These two elements are especially relevant because of their link to the effects on the economic growth. Moreover, the political environment has a strong impact on the economic growth of the less-favoured area, meaning that in Romania the funds accorded by the Government to regions are not equally distributed.

Less-favoured mountain areas, and rural areas

The less-favoured mountain areas, which represent approximately 29, 93% of Romania's territory are the homeplace for 2. 400. 000 romanians. The economic activities from these areas are mainly those related to the wood and furniture industry, agriculture and animal breeding. In the areas surrounding the Carpathian Mountains, due to the numerous protected areas, tourism is not well-developed, excepting the winter season when the winter resorts are full of tourists practising the winter sports.

A major problem for this area represents the process of deforestation, which causes numerous landslips and floods. It is well know that there is a lack of modern woodland planting that affects negatively the imagine of this area. Once a tree is being planted, it needs around 40 or 50 years to grow to maturity.

The forests offer important resources for the economy of this less-favoured area. Excepting wood, mushrooms, seeds, forest fruits, firtrees, mineral waters represent significant resources.

On a short term, tourism and especially mountains resorts should be considered strong points for developing the local economy, especially during the winter. In addition, due to the speed of falling waters coming from the mountains, hydro-electric power plants could offer to this area a new opportunity to attract new investors, becoming an area strong enough to generate new workplaces and greater amount of , , green-energy, , .

The less-favoured areas from the mountains (mainly the rural areas) in Romania are characterised by a scattered population and very low quality infrastructure – for example, only 33% of rural residents are connected to a water supply network and only 10% to a sewerage system, while only 10% of rural roads are considered of “adequate standard” with asphalt cover. The basic social infrastructure (health and education systems, finance) is much less developed than in urban areas. These factors have a negative impact on the quality of life in the rural areas, increase migration, create environment problems, hamper economic development and exacerbate health.

In what rural tourism is concerned, this represents a significant potential which is not sufficient valorised. The tourism sector in 2009 in the rural areas, showed an increase in the number of accomodation structures and accomodation capacity. The development of rural tourism in rural areas depends on the specific of each region, agricultural products, ethnographic regions and folklore. It also depends very much on the existence and especially the quality of the tourist pension, different types of recreation activities, practising agriculture and in some areas winegrowing and animal breeding. For example the specific tourism for Bucovina (North East

less favoured area) is religious tourism, in Maramureş it is the architecture and folklore, while in Transylvania the spotlight is the recreational and cultural tourism, food and wine. The mountain and forestry areas in Romania ensure the opportunities for practising tourism, in particular the so called eco-tourism which could be an alternative income, generating in this way different activities that could offer potential development, due to the unique landscapes, native hospitality, well-conserved traditions and food.

Noteworthy modernization, development and innovation are mandatory for Romania's tourism, together with creating modern and competitive tourism products. The main reasons why tourism is not that well developed in these areas are that there is a lack of organisation, promotion, information as well as qualitatively low tourism infrastructure.

The mountain and rural areas are affected by the significant lack of infrastructure which restrains both the economic development and the most important: the quality of life. The roads are the most important transportation routes, but the quality and development of rural road and traffic is a long way behind the European standard. The undevelopment of the road blocks the economic growth, and interferes with other difficulties concerning the medical and educational services. The road represents the key element for the economic development among the fields of human, social and economic development.

Water supply is another key for the quality of life, as well as in a direct relation to the development of economic activities in rural areas. As an interesting fact in the less favoured areas of Romania only 33% of the rural inhabitants have access to the public water network.

As opportunities for development it is important the exploitation of wood, not exceeding the annual operating capacity, exploiting accessory products (berries, herbs, mushrooms, pine cones), extend forestry product processing industry taking into account regional sustainable development, increasing mechanization of forestry products and create a system to record the number of the cutten trees.

Attracting investors requires a modern infrastructure, forest road development, execution of simple pathways for wood processing machinery. In addition, the mechanization of woodworking would be a step forward in what development of mountain areas is concerned.

North-East less favoured area.

The underdevelopment of this area appears to be correlated with rising unemployment, the prevalence of rural activities and failure to attract foreign investors. The North-East area is marked by the dependence on agriculture, and especially its proximity to other disadvantaged regions (Ukraine and Moldavia). It is the only region in the country with positive natural growth, the share of young population is high, and as positive aspects there is an effective education system in the large cities and skilled labor.

As weakness points, the rate of poverty is high along with the rate of migration to the outside region, there is a lack of openness to change and especially modernization, the crime rate is higher than in the developed regions. To these are added the aging population of the region, undeveloped spirit of entrepreneurship, poor business support infrastructure, poor implementation of product quality assurance system, the low level of industrialization of wood, insufficient promotion of the region's investment potential, lack of cooperation between universities and the poor quality of public services, the lack of specific knowledge in business development, namely the creation of new jobs.

From an economic perspective, there is already a development of the activities related to the exploitation and wood processing, good financial banking and insurance infrastructure, and a large number of specialists in forestry, trade and public services. The industrial structure is fragile mainly due to the usage of outdated technology, having a negative impact on productivity and economic efficiency.

In terms of tourism there is a high share of private ownership in the tourism sector, the existence of spa and national cultural centers, along with the existence of developing the religious tourism (the presence of monasteries), mountain sports (hiking, skiing, paragliding), and the existence of traditional folklore events of the region.

The road infrastructure is poorly developed between East-West areas of the region, there is also a low percentage of upgraded roads, together with the density of railway lines being unequal in accordance with the distribution of the electrified railways.

Furthermore, the small number of cities with natural gas distribution systems, underdeveloped telephone network in rural areas, poor infrastructure development for leisure activities and outdated water treatment and waste management systems, are the main things to be changed for developing this deprived area.

As geographical influence, the winter contributes to disadvantage the area as many investors fear the harshness of the winter cold weather (in transport, industry).

The North-East region may become a major area of concern for investors, EU supporting less favoured areas. There is a legislative framework regarding the development of this area, providing many facilities to investors, including potential experienced staff for research.

As opportunity, it should be taken into account the privatization and restructuring of state-owned companies, the legal framework of local government involvement in regional development is being favorable to this region.

Accelerating the economic recovery and sustainable development represents the key objectives to ensure the overpassing of the actual life condition. Development involves creating the necessary infrastructure to promote the business environment, supporting SME⁵⁴s, developing entrepreneurship, rural development.

In connection with development, the industrial potential should be reevaluated in order to promote existing and new branches of industry. Building up a business infrastructure should help the development of the profitable activities for the less-favoured areas, having a positive impact on the deprived area only with a strict control of the local authorities (in the occurrence of phantom companies without creating new jobs, or poorly paid) and support for access to new technologies, efficient and clean.

Therefore, to ensure the development of the region, it is required effective cooperative ventures to develop effective managerial skills and support technology development.

Although, being a less-favoured area with limited natural resources, human resource is considered a valuable treasure of this region.

Investing in human resources is a priority of any regional development strategy. Just by raising the educational standards and human resource training system, economic recovery could be achieved, raising the standard of living.

Priority strategic directions in the upcoming years should focus on upgrading old roads, upgrading rural telecommunications infrastructure, modernization of water systems, municipal waste by attracting European funding grants. economic growth is the most important indicator of the development of a region. In this way creating a competitive economy is a decisive factor in the evolution of an area or industrial enterprise.

There are assumptions that can form the basis for economic recovery, namely:

- existence of an industrial infrastructure in almost all sub-branches (machine building, chemical, petrochemical, food, textiles, medicines, wood, etc.);
- existence of a well-trained personnel.
- existence of companies in the industry, which benefited from consistent and fresh capital.
- dynamics of small and medium enterprises.

⁵⁴ Small and Medium Enterprises.

Tourism development in the NE disadvantaged

Tourism is a priority, and by the enhancement of existing targets, improving the quality of tourism services, responding to the actual requirements of customers, the image of tourism could be improved by creating a positive image of tourism in the area.

The region presents many opportunities for various and complex recreational activities: religious-tourism, supported by the existence of an impressive number of churches and monasteries, historical monuments throughout the region; cultural-historical tourism, the existing museums, famous castles and a great cultural heritage and folklore of the region. For the economic progress, namely tourism, following investment in tourism, agro-tourism support, upgrading roads in mountainous areas can sketch some results:

- Increase the number of visitors to the North-East region, and investing money in upgrading areas.
- Increase the volume of private investment in tourism.
- Increase the volume of requests for construction of vacation homes that bring additional revenue to local budgets.
- Creating a positive image that offers prospects for large-scale business and investment.
- Working with the media, advertising that will help promote the area.
- Improving the financial situation of the disadvantaged population.
- Scale applications for sponsorship grants for construction of new technologies in the health system.

Financial facilities given to the less-favoured areas.

To assist disadvantaged areas, the Romanian government has proposed that by 2013, these areas should be given various grants and tax breaks to help economic development.

For new investments made in a deprived area, investors can benefit from one or more of the following features:

- full refund of customs duties for machinery, equipment, equipment, vehicles (excluding cars), other depreciable assets which are imported to carry and operate investments in the area, as well as raw materials, spare parts and / or imported components necessary to achieve performance in the area
- exemption from profit tax during the lifetime of the deprived area
- financing special programs, approved by Government Decision
- finance companies investment projects, through co-participation of the state to the social capital
- discounted rates for car transport, inland waterways and rail
- reducing income tax by up to 50%.

These measures taken by the Government, aim at equalizing currently considered disadvantaged areas, with already developed regions of Romania.

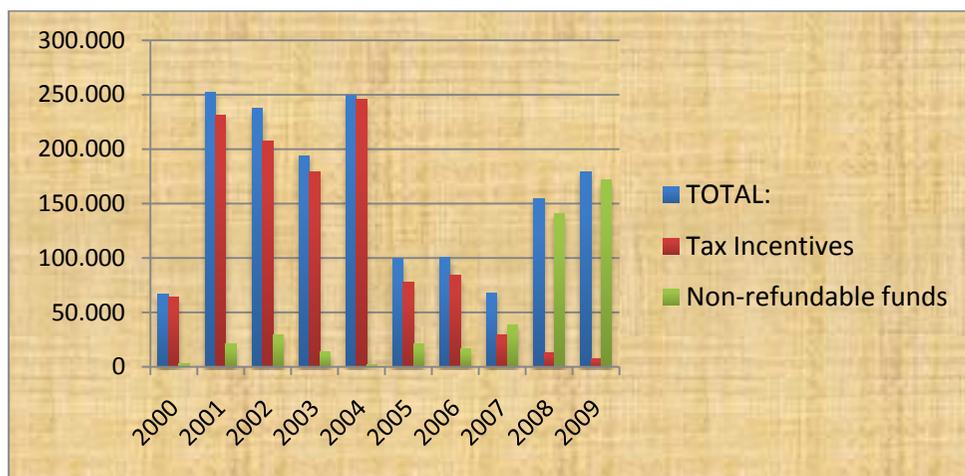
CASE STUDY: THE IMPACT OF STATE AID TO ROMANIA LESS-FAVOURED AREAS -ROMANIAN GOVERNMENT AND COMPETITION COUNCIL 2000-2009

Regional development policy is an essential component of the reform process in Romania, mainly aimed at reducing economic and social imbalances accumulated, preventing the emergence of new imbalances and support the overall sustainable development of all regions of the country.

Evolution of regional aid in Romania during 2000-2009(RON)

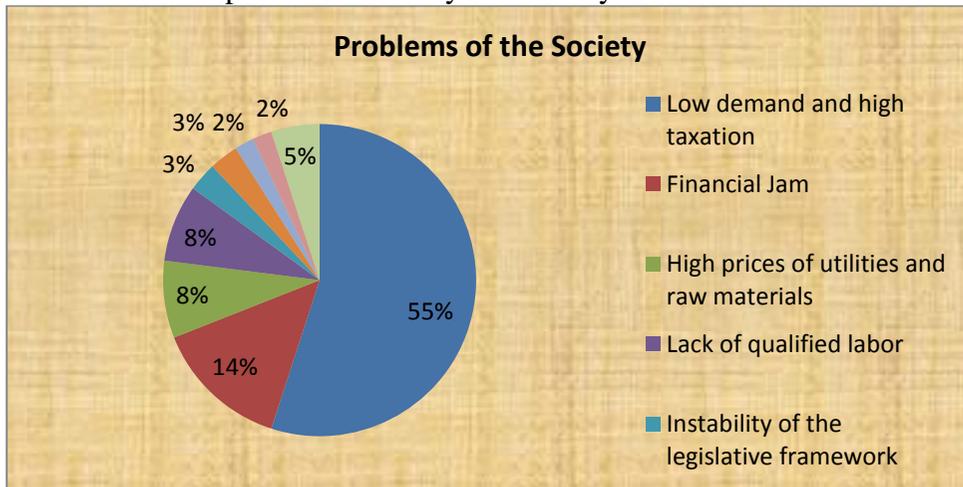
	2000	2001	2002	2003	2004	2005	2006	200	200	2009
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								7	8	
TOTAL:	66.384	252.017	237.110	194.155	249.353	99.644	100.948	67.582	154.226	179.376
Tax Incentives	63.800	230.957	207.568	179.476	245.957	77.391	84.162	29.080	13.206	7.130
Non-refundable funds	2.584	21.060	29.152	13.719	2.098	20.944	16.655	38.502	141.020	172.246



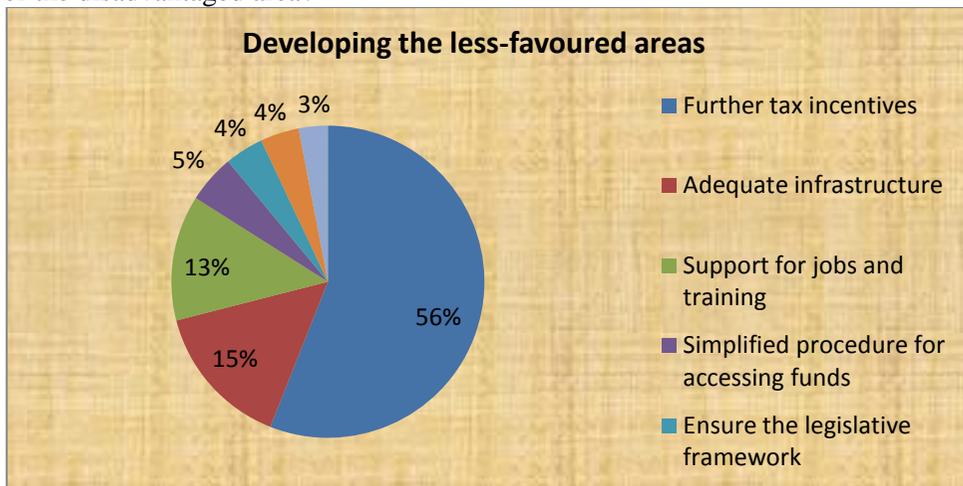
The general trend of decrease in the volume of such aid by 2008 is because the vast majority of aid was granted as tax incentives. Since 2007, new schemes have been initiated with the objective of regional state aid, in full compliance with EU rules. Also while checking operators in June 2010 (a total of 109 from disadvantaged areas), a study was conducted on two questions:

1. "What are the problems faced by the society?"



So it may be noted that the majority consider that there is a low demand due to the current crisis, followed by those who believe that there is a huge financial jam and the high prices of utilities.

2. "What measures do you think the state should take in order to raise the social-economic level of the disadvantaged area? "



Conclusion

Disadvantaged areas in Romania were considered tax havens, the ghost business having prospered without bringing any positive aspects to the less-favoured region. A 2010 study, conducted by Pro TV campaign, showed that 33% of Romanians live with a wage of about 200 euros per month. Between 1998 and 2010 there were approximately 160 cities declared disadvantaged, where many companies tried to move its headquarters to the enjoyment of the exemptions (about 6 billion RON). Companies wishing to relocate their headquarters in these areas had no such development project, creating a monopoly on the labor market, taking advantage providing extremely low wages for people who were willing to work.

Moreover, an investor from a deprived area is required to engage minimum 2 employees residing in that area, which would lead to lower unemployment in the disadvantaged region. State aid to disadvantaged areas led the companies to develop diversified economic activity, the population has become more responsive to the conversion process. Most companies have relied exclusively

on these grants from the government instead of continuing research and finding its own funds, tax incentives were an additional cost for Ministry of Public Finance, who had to make numerous tax inspection. For the best possible structural funds for the development of disadvantaged areas is recommended to promote information campaigns in both economic agents and local authorities. The authorities also need to simplify legislation for obtaining grants. Attracting investors outside the LFA can be achieved by creating industrial parks along with investment in local infrastructure.

Linked to the yield, most traders have noticed a decline in profit in 2005, the period during which state aid stopped, increases recorded in 2006 and 2007, followed by a period of declining profits, because of the decreased number funds granted. Migration factor (or even interregional migration in other European countries) resulted in a decrease of GDP especially the North-East region. However, there are positive signs, as investors obtained licenses in less-favoured areas, have created an estimated 44, 300 new jobs (Source: The Competition Council in the year 2009), representing about 5. 3% of the total unemployment number.

Less-favoured areas in Romania could easily disappear if the political factor would not have direct impact on the funds granted, only changing legislation and eliminating regional bureaucracy, would lead to an improvement in the economic situation of each region.

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TRENDS OF EMPLOYMENT IN INFORMAL SECTOR IN ROMANIA DURING CRISIS; ECONOMIC AND SOCIAL EFFECTS

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The present paper emphasizes the size and trend of employment in the informal sector as affected during the recent years by the crisis and by showing the relation with informal economy. The paper is structured on three parts. The first part focuses on the concepts and methodology popular and recommended by the international organizations together with the ones applied for the estimations presented in the paper. It brings information on the conceptual framework endorsed by International Labour Office (ILO) on the 15-th International Conference of Labour Statisticians (15th ICLS) - on informal sector (which was subsequently included in the revised international System of National Accounts, SNA 1993) and employment in informal sector - and on 17th ICLS, on informal employment. Methods used for obtaining the estimates for Romania figures on informal economy and employment are treated. For the informal economy the method used by National Statistical Institute of Romania (INS) for estimating the underground economy and own calculations were used. For estimating the employment in informal sector a method developed by the authors was applied which consists, on short, on reconciliation between demand and supply available from statistical sources. Second part is dedicated to the analysis on the estimates produced, with observations on the trends induced by the crisis on informal economy and employment. The second also deals with several characteristics and dimensions of the employment in informal sector by gender and economic activities as well as the relation with several macroeconomic and social indicators. Finally, the third and last part proposes the direction of action and policies aimed to combat and reduce the informal sector and to transfer it into the "light", "visible" side, i.e. the formal sector.

Key words: informal employment, informal economy, economic crisis

JEL classification: E25, E26, G01

I. Theoretical and methodological considerations

Informal sector

Taking into account the importance of the role played by the informal economy for employment creation, income generation and poverty reduction, it is essential first of all to establish the content and meaning of the concepts used for defining employment in informal sector as against informal economy. Secondly, these considerations are necessary to better understand the characteristics and evolutions of both phenomena, i.e. informal sector regarded from the employment perspective as well as from the economic one. And again it is worth to clearly present the operational definitions developed for statistics applied on the informal employment and economy.

In January 1993, the *Fifteenth International Conference of Labour Statisticians (15th ICLS)* adopted an international statistical definition of the informal sector, which was subsequently included in the revised international *System of National Accounts (SNA 1993)*. Inclusion in the SNA of the informal sector definition was considered essential as this would make possible indentifying the informal sector separately in the accounts and, hence, quantifying the contribution of the informal sector to the gross domestic product (GDP).

As stated in the OECD Handbook, “the vast majority of informal sector activities provide goods and services whose production and distribution are perfectly legal. This is in contrast to illegal production. There is also a clear distinction between the informal sector and underground production. Informal sector activities are not necessarily performed with the deliberate intention of evading the payment of taxes or social security contributions, or infringing labour legislation or other regulations.”

At the Fifteenth International Conference of Labour Statisticians, the **informal sector** was characterized as „consisting of units engaged in the production of goods or services with the primary objective of generating employment and incomes to the persons concerned. These units typically operate at a low level of organization, with little or no division between labour and capital as factors of production and on a small scale. Labour relations - where they exist - are based mostly on casual employment, kinship or personal and social relations rather than contractual arrangements with formal guarantees”.

In order to obtain an internationally agreed on definition of the informal sector - acceptable to both labour statisticians and national accountants - the informal sector had to be defined in terms of characteristics of the production units (enterprises) in which the activities take place (enterprise approach), rather than in terms of the characteristics of the persons involved or of their jobs (labour approach).

For statistical purposes, the **informal sector** was defined as a group of production units which, according to the definitions and classifications provided in the United Nations System of National Accounts (SNA Rev.4), form part of the household sector as household enterprises or, equivalently, unincorporated enterprises owned by households⁵⁵ Within the household sector, the informal sector comprises:

- (i) "informal own-account enterprises" (i.e. household enterprises owned and operated by own-account workers, either alone or in partnership with members of the same or other households, which may employ contributing family workers and employees on an occasional basis, but do not employ employees on a continuous basis); and
- (ii) the additional component consisting of "enterprises of informal employers" (i.e. household enterprises owned and operated by employers, either alone or in partnership with members of the same or other households, which employ one or more employees on a continuous basis). For operational purposes, enterprises of informal employers may be defined, in terms of one or more of the following criteria: (i) size of the unit below a specified level of employment; (ii) non-registration of the enterprise or its employees.

Employment in informal sector and informal employment

The *15th ICLS* also defined the **employment in informal sector** as ”comprising all jobs in informal sector enterprises, or all persons who, during a given reference period, were employed in at least one informal sector enterprise, irrespective of their status in employment and whether it was their main or a secondary job,, (Hussmans R., 2004)

The Seventeenth International Conference of Labour Statisticians (17th ICLS) endorsed the definition of the informal employment which is a job-based concept as compared to the employment in informal sector which relates to the enterprise-based concept. Thus, the 17th ICLS defined **informal employment** as the total number of informal jobs, whether carried out in formal sector enterprises, informal sector enterprises, or households, during a given reference period, comprising (see the below diagram): cell 3 - own-account workers employed in their own informal sector enterprises; cell 4 - employers employed in their own informal sector enterprises;

⁵⁵ According to the SNA (Rev.4), household enterprises are units engaged in the production of goods or services which are not constituted as separate legal entities independently of the households or household members that own them, and for which no complete sets of accounts (including balance sheets of assets and liabilities) are available which would permit a clear distinction of the production activities of the enterprises from the other activities of their owners and the identification of any flows of income and capital between the enterprises and the owners.

cells 1 and 5 - contributing family workers, irrespective of whether they work in formal or informal sector enterprises; cell 8 - members of informal producers' cooperatives; cells 2, 6 and 10 - employees holding informal jobs in formal sector enterprises, informal sector enterprises, or as paid domestic workers employed by households; cell 9 - own-account workers engaged in the production of goods exclusively for own final use by their household, if considered employed. Cell 7 refers to employees holding formal jobs in informal sector enterprises⁵⁶

According to the diagram below, the coverage of different segments of informal employment, in relation with the concept applied, are:

- *Informal employment:* Cells 1 to 6 and 8 to 10.
- *Employment in the informal sector:* Cells 3 to 8.
- *Informal employment outside the informal sector:* Cells 1, 2, 9 and 10.

Conceptual Framework: Informal Employment

Production units by type	Jobs by status in employment								
	Own-account workers		Employers		Contributing family workers	Employees		Members of producers' cooperatives	
	Informal	Formal	Informal	Formal	Informal	Informal	Formal	Informal	Formal
Formal sector enterprises					1	2			
Informal sector enterprises (a)	3		4		5	6	7	8	
Households (b)	9					10			

(a) As defined by the Fifteenth International Conference of Labour Statisticians (excluding households employing paid domestic workers).

(b) Households producing goods exclusively for their own final use and households employing paid domestic workers.

Note: Cells shaded in dark grey refer to jobs, which, by definition, do not exist in the type of production unit in question. Cells shaded in light grey refer to formal jobs. Un-shaded cells represent the various types of informal jobs.

Methods for measuring the informal sector

The method chosen plays an important role in determining the size and characteristics of the informal sector in terms of employability. . Usually the indirect methods allow to capture the information on employment in informal sector while the direct methods on informal employment. Main **direct methods** as described in Chapter 10.3 Measuring the Informal Sector of the OECD Handbook already mentioned are:

Labour Force Surveys (LFS) - monitoring the number and characteristics of the persons in the informal sector and the conditions of their employment and work as can be achieved by periodically including a few additional questions pertaining to the informal sector definition in an existing labour force or similar household survey

Household Income and Expenditure Surveys - household income and expenditure surveys are a potential source of information on the demand by households for goods and services produced in

⁵⁶ Such cases, which are included in employment in the informal sector but excluded from informal employment, may occur when enterprises are defined as informal in using size as the only criterion, or where there is no administrative link between the registration of employees and the registration of their employers

the informal sector. They cannot provide information on the total demand for informal sector products, but only on household final consumption expenditure for informal sector products, which is only a part of the total demand.

Informal Sector Enterprise Surveys - an enterprise survey presupposes the availability of a sampling frame of informal sector enterprises or establishments. List frames are usually not available. Often, enterprise surveys can be conducted only following a census of informal sector units or a general economic/establishment census covering the relevant branches of economic activity and containing the items required for the identification of informal sector units.

Informal Sector Mixed Household-Enterprise Surveys - such surveys are the most suitable approach when the aim is to collect comprehensive data about the informal sector. These surveys can cover all informal sector entrepreneurs and their activities, irrespective of the size of the enterprises, the kind of activity and the type of workplace used, and irrespective of whether the activities are undertaken as main or secondary jobs. In particular, they can also cover activities undertaken inside the owner's home or without fixed location.

Modules attached to household surveys - attachment of an informal sector module to an existing household survey (such as LFS) means that the informal sector survey sample is obtained as a sub-sample of the base survey.

Integrated surveys - can be seen as special types of modular surveys. Integrated surveys are designed to meet several objectives at the same time, i.e. the collection of data about the informal sector and other topics, e.g. labour force, household income and expenditure.

A on the **indirect methods** used to measure the undeclared work (UDW) was presented in the Final report to the European Commission in December 2009 by a group of experts from GHK and Fondazione G. Brodolini. According to this report, *indirect or general methods* rely on comparisons of macroeconomic aggregates (such as national accounts, electricity consumption, cash transactions) in order to estimate the extent of UDW; the methods in this category are: (i) Discrepancy methods; (ii) Labour Input methods; and (iii) the Degree of Participation method.

Econometric approaches group together all the methods that produce a total quantitative estimate of the non-observed economy by means of a model; there are three distinct methods in this group: (i) the Monetary (Tanzi) Method; (ii) Global Indicators Methods (Electricity Consumption); and (iii) Latent Variable Methods.

Discrepancy method - comparing income and consumption – uses as approach for estimation: declared income which does not include income that has been concealed for tax reasons, whereas the estimate of consumption does. Thus, the difference between the two estimates can be attributable to tax evasion. Another popular application of discrepancy methods - recommended by Eurostat to ensure the exhaustiveness of national accounts - is to compare the findings of labour force surveys (LFS) with the recorded labour demand (e.g. based on company declarations to tax or social security authorities or national statistical offices).

Labour Input method - information on the supply side of the labour market – for instance the Labour Force Survey (LFS) – can register a part of the undeclared work because individuals are less motivated than enterprises to conceal the nature of their work. In this method, the above information is compared with information on the demand. It makes use of several statistical and administrative sources.

Degree of participation method - a well-established procedure does not exist. As a general framework, positive (negative) variations in labour force participation in the official economy are seen as negative (positive) variations in undeclared labour.

Monetary Method - Tanzi Method – based on following key assumptions: underground transactions are conducted only on a cash basis.

Global Indicators Method - Electricity Consumption - the difference between the growth rate of electricity consumption (a proxy for the growth rate of total economic activity) and the growth rate of measured GDP yields an approximation of the growth rate of unrecorded income.

Latent Variable Methods - MIMIC (multiple indicators and multiple causes) or DYMIMIC (dynamic multiple indicators and multiple causes) - based on following key assumptions: Undeclared work is an unobserved (or latent) variable that influences observed indicators and is determined by observed variables.

Estimation methods used for Romania

A. The trends of the informal economy were based on the estimates on share from GDP of the underground economy.

In Romania, the National Institute for Statistics (INS) estimates within National Accounts the non-observed economy (NOE), also known as underground economy, which stands for productive legal activities but deliberately concealed from public authorities for such reasons as to avoid the payment of income, value added or other taxes; to avoid the payment of social security contributions; to avoid having to meet certain legal standards; and to avoid complying with certain administrative procedures, such as completing statistical questionnaires or other administrative forms.

The **informal sector** consists (according to ILO definition) of productive units characterised by a low level of organisation, with little or no separation between capital and work, and by work relations based on kinship and/or social relationships, rather than formal contracts. These units belong to the household sector. The owners of such units are totally responsible for all financial and non-financial obligations undertaken for the production process. If the activity of these recorded units is deliberately hidden they enter in the sphere of economic underground.

For the identification of the NOE, the whole economy is split into two sectors: formal and informal. For **formal sector**, the estimation of the INS Romania consists of:

- under-reported value added by registered institutional units in the formal sector (non-financial corporations) because of the underground utilisation of labour;
- under-reported value added by registered institutional units in the formal sector (non-financial corporations) because of value added taxes evasion.

First the estimation of black labour is performed. The activities which are under-reported are evaluated based on estimation of input of labour, procedure recommended by SNA 93. Using this approach, it is possible to evaluate the irregular labour within the productive process and under-declaration of the production obtained by means of regular labour. The method used is based on the comparison between the labour force supply and demand in order to identify the persons who carry out a legal activity in a unit from formal sector, but are not declared to authorities.

Step two – the estimation for VAT evasion is made. In order to obtain gross wages which stay at the basis of GVA compilation, the obtained number of persons engaged in “black labour” is multiplied with the average gross salary, specific by each industry, obtaining Compensation of employees. Specific coefficients of Compensation of employees into GVA are used - (characteristic for the small enterprises from the respective branch of activity, identified based on Structural Business Survey - SBS) and the amount of gross value added is estimated.

Estimations are made for the VAT evasion. One part of the VAT evasion represents the VAT for underground economy already estimated using methods presented above, and other part represents the VAT evasion of reported turnover. For the whole VAT, the tax evasion is calculated by the difference between the theoretical VAT and the value received by the State Budget. Theoretical VAT is calculated for intermediate consumption, final consumption of households, final consumption of general government and GFCF based on rates of VAT by products, defined by the law. This fraud is included in output and GVA for each corresponding branch.

For the **informal sector**, the estimations are calculated for all activities performed by family associations and self-employed. Data on these activities are available from the Ministry of Public Finance. Out of the Romanian Labour Force Survey (AMIGO) information about the number of persons who work in family associations and self-employed are used. The estimations made are based on the principle according to which the incomes realised by non-paid workers (persons from family associations and self-employed) cannot be less than the average wage earned by employees in the same activity, from small units. The income declarations of the Ministry of Public Finance received from registered self-employed and family associations are compared

with the value of these calculations. As result of this analysis, the incomes are adjusted, and the tax evasion of the units registered within the informal sector is completely removed.

Another important type of non-observed economy is represented by the activities carried on in **units non-registered**. In this category are included: dressmakers, tailors, workers who repair cars, hairdressers, house painters, plumbers, teachers giving private tuition, people into house-rental during holiday time. For such activities a distinct valuation is undertaken using specific assumptions and available data sources from the statistical system. These data sources are specific to each kind of activity, as described above.

- **Hotels:** the basic assumption is that the number of non-registered tourists is equivalent to 1/3 of the total registered tourists. The average values of the accommodation for a night, considering a number of 15 holiday nights per year is, then, multiplied by the number of non-registered tourists. The result is considered as the output. The intermediate consumption is estimated by using the IC/registered output ratio of the formal sector.
- **Construction:** It is considered that 50% of the total self-employed registered in this activity carried out also a non-registered activity. This number is multiplied with the average gross salary of the construction activity and the result is considered as GVA. To calculate the production it is used the ration GVA/registered output of the small construction enterprises from the formal sector.
- **Education:** it is considered that a half of the pupils registered in the last year of the secondary school as well those from the last year of the high school took meditations. Their numbers are multiplied by the average value of a lesson, by the frequency of the lessons per week as well as by the number of weeks in a year.

B. Estimates on employment in informal sector are the results of own calculations based on the discrepancy method on labour input for employees as provided by the Romanian Labour Force Survey (AMIGO) for demand component and the Labour Cost Survey for supply component. Informal employment does not exist in public administration was the assumption used in terms of coverage on economic activities. For the non-paid employment the estimates provided by AMIGO; adjustment coefficients were applied by economic branches following an algorithm similar to the one used by National Accounts for estimating the labour from informal sector and non-registered units.

II. Employment in the Romanian informal sector and its impact on several economic and social phenomena

Informal economy and employment during crisis

The effects of the recent financial crisis were felt in Romania since the second half of 2008. The crisis has fuelled the economy. Hidden economy and evasion of tax or payroll taxes have become increasingly common. The private sector has limited the business and resorted to layoffs. In the budgetary sector the austerity measures aimed also to drastic reductions in staff and earnings. The measures taken for reducing earnings in the budgetary sector have influenced the private sector to taken similar action. Decreased purchasing power has led people to buy cheaper products that are often found on the black market where no taxes are paid. The shadow economy has taken on, with negative consequences for state revenues, thereby stimulating the continuation of the crisis. The estimates on informal sector evolution (*see Annex, Figure 1*) – expressed in terms both economic as percentage from GDP, and labour as percentage from total employment – show how informal sector spread widely after 2008. The share in GDP grew to 22.2% from 19.6% in 2008 (after a 21.0% in 2009). The share in employment was even higher - by 6 percentage points over the last two years (from 23.2% in 2008 to 29.2% in 2010). Even if of different amplitudes, both phenomena have similar trends with negative impact induced by the crisis.

Trends of the employment in informal sector

Since whether to include or not agricultural activities is controversial, the estimations were prepared in both versions (with and without the agricultural sector). In the following, the version including agricultural sector (TIA, total population including agricultural sector) was analyzed.

Estimations on employment in informal sector (*see Annex, Figures 2 and 3*) made as described above lead to emphasising several important observations. First of all, the phenomenon is widespread and if in 2002 the share of employment in informal sector in total population was less than a quarter (23.3%, similar to the share estimated for 2002, i.e. 23.3%), in the following years it recorded higher levels (25.7% in 2004, 24.2% in 2008), and falling in 2008 to 23.2%. But, after the emergence of the crisis, the phenomenon regressed significantly, and in 2009 it already exceeded a quarter (25.9%) of total employment and continued growing to 29.2% in 2010.

The second observation relates to the higher shares for male population as compared to female one, true for the entire period without any exception: e.g. 24.0% as against 22.5% in 2002 and 30.8% as against 27.4% in 2010.

Employment in informal sector (*see Annex, Table 1*) is more met in:

- agricultural activities (with shares below 38.5% until 2008 but reaching 39.0% in 2010) where most part is composed from elderly, persons with low education levels, who work in their own households mainly to produce for self-consumption (and less for market); the phenomenon is almost equally spread irrespective of gender; 2010 shows a migration to agricultural sector of the jobless population who remained without a work place due to dismissals in the non-agricultural activities as effect of the recent crisis;
- collective, social and personal services⁵⁷ (raising from 46.0% in 2002 to 50.4% in 2010) where mainly two categories of persons are identified - those who perform services that require a certain qualification (such as hairdressers, tailors, dressmakers, boots makers etc.) and those who have no qualification or only very low education levels and who, actually, perform only domestic activities (cleaning, laundry, ironing, cooking, baby-sitting or care services for elderly or sick persons, gardening, house painting etc.);
- real estate transactions – difficult to be identified as such for the period 2002 – 2006 because, according to Rev.1 version of CANE⁵⁸ the coverage was considerably higher also comprising renting and business activities, which were excluded in version Rev.2 of CANE – where during 2002-2006 more than a quarter of employed population was engaged in the informal sector; looking at 2008 – 2010 period the shares are significantly higher with a clear ascendant trend (from 42.3% in 2008 to 50.3% in 2010) but the phenomenon is observed exclusively for real estate transactions and presents deep gender disparities: the share for men rises 51.2% in 2008 and 62.5% in 2010 while for women 34.3%, respectively 38.1%;
- constructions (where data are comparable over time since the differences in coverage between the two CANE are insignificant), activities characterised by a constant increase over the entire period from 20.8% in 2002 to 36.6% in 2010;

In terms of employment, the informal sector absorbed workforce in every economic activity (*see Annex, Table 1*), with significant values in trade (18.2% in 2002, but 27.2% in 2010), hotels and restaurants (13.2% in 2002 and just over a fifth in 2010), mining (15.4% in 2002 significantly increased in 2010 to 23.5%), manufacturing (13.0% in 2002 to 12.8% in 2008 rising to 20.3% in 2010) etc.. Noteworthy is the growth of informal employment observed wherever the formal sector created a niche, leaving uncovered the populations demand, for inter-urban service

⁵⁷ Due to the differences between the two CANE (Classification of Activities from National Economy) versions (Rev. 1 and Rev.2) the coverage for collective, social and personal services is not fully comparable for period 2008 – 2010 with previous years.

⁵⁸ Classification of Activities from National Economy, harmonized with the corresponding European Classification NACE (Rev.1 until 2008 and Rev.2 from 2008 onwards)

transport, for instance. Following reduction, or interruption of the transport systems and the spectacular increase of the county's prices on rail transportation, many private companies transport networks emerged and developed rapidly in recent years. Therefore, the males employed in the informal sector in transport held significant shares for the entire period (16.2% in 2002, 19.2% in 2004, 14.7% in 2008 and highest in 2010 - 22.8%).

Services such as education and health deserve particular attention. Although the shares in total employment of the corresponding economic activity of those working in informal sector had a positive evolution by diminishing from 22.3% in 2004 to 17.0% in 2008 in the case of education and from 20.6% to 17.1% in the case of health, the year 2010 brought a negative impact, the shares increasing by about 10 percentage points as against 2008 (with levels of 27.8% for education and 26.5% for health). The existence and maintenance at close values – for the entire period – of the shares of employment in informal sector demonstrate the deficiency of the education and health care systems in Romania.

2010 marked a visible regress; estimates have shown major deteriorations in many economic activities.

In addition to those already mentioned, the situation recorded for activities (According to CANE Rev.2) in “Water distribution; sanitation, waste administration, decontamination activities” has to be commented, where the share of employment in informal sector grew to 42.6% (as compared to 25.0% in 2008), in “Activities of administrative services and activities of support services” where the regress was of 14.6 percentage points as against 2008 (40.3% in 2010 comparing to 25.7%) as well as in “Showbiz, cultural and recreation activities” where the gap against 2008 amounted to 18.6 percentage points (36.5% in 2010, 17.9% in 2008).

When looking at the distribution of employment in the informal sector by economic activities (see Annex, Table 2) is visible the strong share of the agricultural sector which absorbs an overwhelming part of the total employment in informal sector (59.8% in 2002 but decreasing year by year, in 2010 reaching the lowest level over entire period, i.e. 40.2%); a significant share is held by the manufacturing industry (oscillating between 11.2% in 2002 and 15.7% in 2004, in 2010 recording a share of 12.4%) and wholesale and retail trade (increasing from 7.3% in 2002 to 11.4% in 2010).

Given the controversial issue of whether including or excluding agriculture from the scope of the informal sector, there is a need to assess the size and structure of this phenomenon on the particular variant, only for the non-agricultural activities (TEA — total population excluding agricultural sector).

From this perspective (see Annex, Table 2, series on TEA) - i.e. the distribution of the population employed in informal sector economic activities - the informal sector operates at the highest level in manufacturing activities (29.6% in 2002, down to 25.7% in 2006 - version of CANE Rev.1 and Rev.2 version CANE: 21.4% in 2008 decreased slightly to 20.7% in 2010), more among women than men (with a gap of less than 5 points percentage in 2002, declined to less than 2 percentage points in 2010).

Similarly, trade activities are on the second place (around 20% for the entire period), but gender disparities disadvantage the women.

Third place is for construction activities, where the proportion of workers in the informal sector increased during 2002-2008 (from 9.9% to 17.4% in the total workforce engaged in informal activities), but decreased in 2010 (15.9 %). The overwhelming majority of those engaged in this activity are men (14.3% of men employed in the informal sector in 2002, but 26.4% and 24.1% in 2008 and 2010 compared to only 2.0 to 3.0 % of women, regardless of year). High values are found in transport, storage and communications, especially among the male population (decreasing from 10.1% during 2002-2008 to 7.6% for 2010 to rise to 8.3 %).

Again the education and health activities draw the attention by the amount of people involved in the informal sector, especially in the case of women where 1 in 10 persons are in this situation.

The level of informal employment for collective, social and personal services remains high, the proportion for women being of 11.0% in 2006 (the maximum during the analyzed time interval), respectively, 6.2% in 2008 (minimum) compared with 9.7% and 4.3% - the percentage of men for the same period.

Impact on several economic and social phenomena

Employment has declined. The employment rate of population (NIS, AMIGO) aged 20-64 years was 63.3%, decreasing by 1.1 percentage points compared to 2008 and among the lowest compared with other Member States of EU. In 2010 was noticeable the modification of the structure of the employed population between the two basic components: employees and non-employees. Structural changes in 2010 compared to 2008 occurred against the background of the movement towards agriculture, a phenomenon seen in the diminishing share of employees (with 2.5 percentage points) and increasing share of non-employees in agriculture (mainly self-employed and family workers) by 3.1 percentage points.

Unemployment has increased. ILO unemployment rate rose to 7.3% in 2010 from 5.8% in 2008. Registered unemployment rate (according to National Agency for Employment) has seen an upward trend (*see Annex, Figure 4*) by March 2010 (8.4% - maximum of three years), after reaching a minimum in the months May, June, July 2008 of only 3.7%.

Increasing unemployment was the direct result of the massive layoffs and drastic reduction of vacancies. The number of vacant jobs offered by employers in 2010 represented only a quarter of those corresponding to 2008 (*see Annex, Figure 5*).

The purchasing power of the population was reduced. Total household real income index (INS, Household Budget Survey (ABF) for 2010 compared to 2009 was of 93.8%. Real earnings fell in 2010 to 96.0% as against 2009 and to 94.5% as against 2008.

Economic progress has been affected. GDP decreased (*see Annex, Figure 6*) in 2009 compared to 2008 (92.9%), decrease that continued in 2010 (98.7% compared to 2009)- INS, National Accounts and own calculations). Population households actual individual final consumption index also showed a declining 91.3% in 2009 compared to 2008, and 98.0% in 2010 compared to 2009. Taxes on product were also affected; they have decreased in 2009 compared with the previous year to 87.5% and 96.0% in 2010 compared to 2009. Poverty has been exacerbated. At risk of poverty rate⁵⁹ increased to 22.3% compared with 21.7% in 2009 (but slightly below that of 2008 - 22.4%).

III. Policies aimed at stimulating employment diminishment in the informal sector

Policies and measures to lower and finally eliminate informal labour should be developed according to Romanian particularities. A prerequisite for such measures and policies to take effect is to build strong structures and tools to ensure their sustainability and independence, regardless of political changes. Otherwise, the risk that they remain only "on paper" and have no actual effect in reality is extremely high.

Policies should be focussed according to target populations.

One type of policy should be outlined for the group of people who are in this situation beyond their control and working in the informal sector because they have no other choice. This applies particularly to vulnerable groups on the labour market (with low education, low skills, no

⁵⁹ According to EUROSTAT and EU documents (list of structural indicators, list of social inclusion indicators), the indicator used to measure (relative) poverty is named "at-risk-of-poverty-rate", to reflect that the income is only one of the multiple dimensions of poverty (the monetary dimension). The indicator is calculated as the proportion of persons from households with a disposable income less than a threshold representing 60% of the median disposable income by equivalent adult in the total population. The change in time of this relative poverty measure expresses only the influence of the income distribution modification on the proportion of poor, but not the evolution (increasing or decreasing) of the welfare level.

opportunities for access to a minimum capital to allow a small business on their own, etc..) and even discriminated (at the extremes of the active working life - is considered too young or too "old"). For these groups of persons systems on social protection and assistance need to be improved, to encourage their employment in the formal sector through targeted grants, and a functioning system should be put in place for retraining and vocational conversion. Appropriate conditions should be created to enable mobility and labour deployment to regions where demand exists.

Another type of policy should be outlined for the second largest category, which is present within informal employment - the kind that has chosen this path. For them the objective is of identifying best practices and measures to transfer them into the formal sector. In this category are partly owners of non-registered units, with firms registered but having staff employed on the basis of unlawful agreements (without employment contract), those who under-declare incomes from profit, and unauthorized own-account workers or, again, those declaring only a small share of income. This category includes those who - employee and employer - in practice declared a low level of remuneration, part of the actual earning being paid "in hand". Their successful move from informal to the formal sector can be done only through appropriate incentive structures, so that the benefits of the formal sector should be obvious and desired.

One of the main courses of action to reduce and even eliminate informal labour is to reduce the tax burden, especially in sectors where informal work is manifested most actively: small and medium-sized enterprises, economic activities identified as having a significant share of informality. To this end, it is necessary to streamline bureaucracy and reduce the time lag for setting and registering an own-account activity, along with creating favourable conditions for obtaining credit.

Special attention should be paid to measures for improving labour legislation taking into account the practical realities, and allowing for a more flexible labor market:

- encouraging the creation of part-time jobs
- coverage of the diversity of employment agreements that are practiced, but are not recognized and atypical types of employment programs;
- facilitating access to training and education (for example, for those who want to continue their studies, improving the skill or expertise, etc.).
- facilitating the reconciliation of family and professional life (for those who care for children attending preschool or elementary school, elderly or ill relatives who need help, assistance and supervision, etc.).

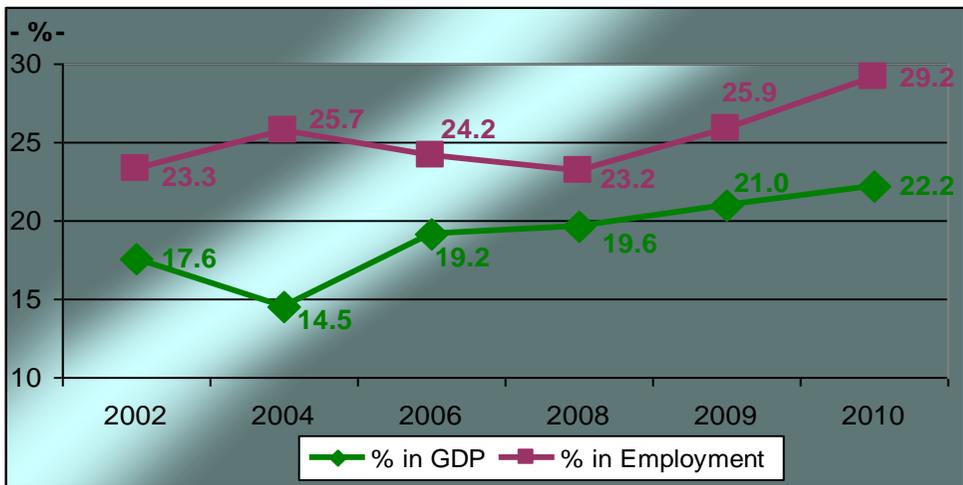
It is necessary to create structures for recognition and bringing into "light" services provided in households (home repair, fence, etc., baby-sitting, care of sick and/or elderly, performing household chores - cooking, cleaning, washing etc.) accompanied by the implementation of a benefit system in terms of tax reduction for households using/employing such services.

Strengthening cooperation between social partners is of great importance. Good coordination and collaboration among the partners will result in increased detection and reporting cases of fraud on the informal economy

Finally, in parallel with the political and economic measures, the mentality of individuals has to be changed, for both workers and employers, for the public in general. Information campaigns should be geared towards raising awareness of the risks that workers are subject to because of avoiding the declaration of work undertaken and income gained, to social stigma on informal work and those involved, from both sides - employer and employee. One key objective of the campaign should be aimed at removing deep-rooted distrust of ordinary Romanians in public institutions.

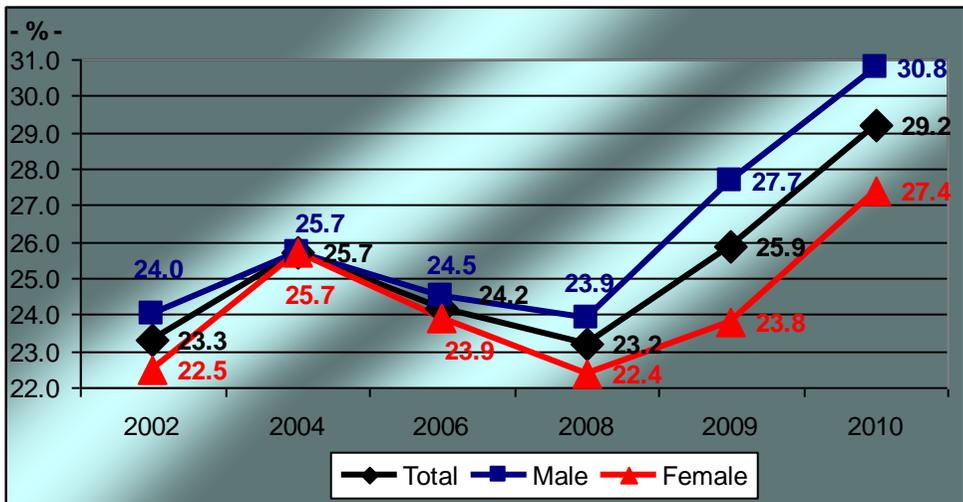
Annex.

Figure 1. Informal sector – share in GDP and in employment



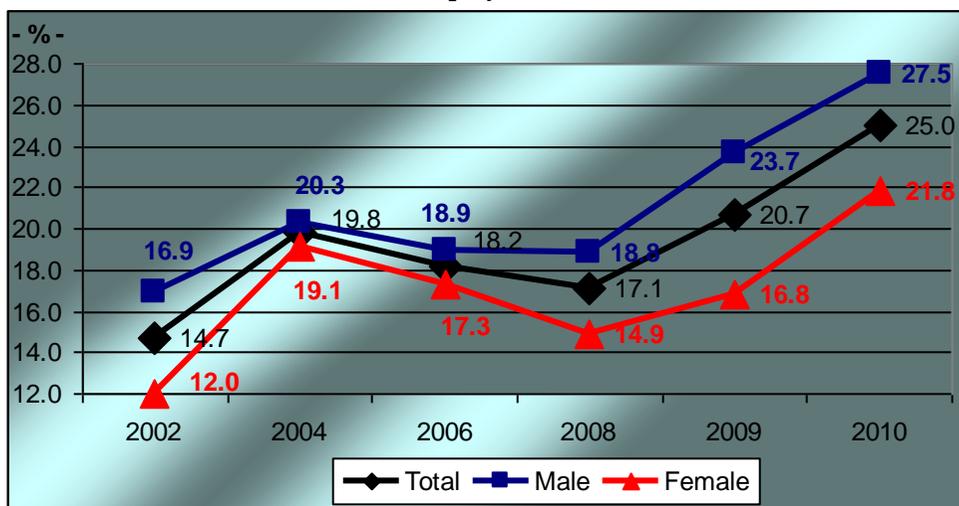
Source: INS, National accounts, Labour market statistics and own calculations

Figure 2. Share of employment in informal sector (including agricultural sector) in total employment



Source: INS, Labour market statistics and own calculations

Figure 3. Share of employment in informal sector (excluding agricultural sector) in total employment



Source: INS, Labour market statistics and own calculations

Table 1. Share of employment in informal sector by economic activities

a) total, male and female population

CAEN Rev.1	2002	2004	2006	2008	2009	2010	CAEN Rev.2
	Conform CAEN Rev.1			Conform CAEN Rev.2			
Male and Female							
TIA	23.3	25.7	24.2	23.2	25.9	29.2	TIA
TEA	14.7	19.8	18.2	17.1	20.7	25.0	TEA
A	38.3	38.4	38.4	38.5	38.7	39.0	A
C	15.4	20.8	15.5	13.7	18.9	23.5	B
D	13.0	18.1	15.6	12.8	15.8	20.3	C
E	12.6	16.1	13.1	11.2	14.8	17.9	D
F	20.8	24.2	24.1	25.0	40.0	42.6	E
G	18.2	23.7	23.0	26.5	30.6	36.6	F
H	13.2	17.3	16.8	20.9	23.5	27.2	G
I	15.0	18.9	16.9	14.9	19.5	23.3	H
J	12.8	19.6	20.6	16.5	18.6	20.5	I
K	26.4	26.9	25.6	19.0	25.0	29.2	J
M	13.0	22.3	19.6	17.8	20.4	23.3	K
N	12.8	20.6	19.4	42.3	52.5	50.3	L
O	46.0	48.3	47.1	21.4	27.6	30.4	M
				25.7	34.1	40.3	N
				17.0	22.4	27.8	P
				17.1	21.7	26.5	Q
				17.9	33.8	36.5	R
				46.9	45.9	50.4	S

b) male population

CAEN Rev.1	2002	2004	2006	2008	2009	2010	CAEN Rev.2
	<i>Conform CAEN Rev.1</i>			<i>Conform CAEN Rev.2</i>			
Male							
TIA	24.0	25.7	24.5	23.9	27.7	30.8	TIA
TEA	16.9	20.3	18.9	18.8	23.7	27.5	TEA
A	37.4	37.6	37.9	37.5	37.9	38.6	A
C	15.5	20.5	15.5	13.6	19.4	24.2	B
D	14.7	18.4	15.8	13.7	17.9	21.3	C
E	13.3	15.7	13.0	10.6	15.2	18.2	D
F	21.4	24.5	24.5	25.6	43.6	45.5	E
G	23.8	27.9	27.1	27.5	31.7	37.6	F
H	20.0	22.5	20.4	25.6	29.8	33.9	G
I	16.2	19.2	16.6	14.7	19.9	22.8	H
J	14.4	19.2	20.1	19.7	23.4	22.2	I
K	31.6	29.2	26.6	19.5	27.8	30.8	J
M	18.0	27.3	23.7	19.3	23.5	25.9	K
N	15.5	23.3	20.2	51.2	68.4	62.5	L
O	54.8	46.8	47.5	24.7	35.4	37.1	M
				26.3	38.1	43.6	N
				22.7	33.9	40.7	P
				18.7	27.8	32.7	Q
				19.5	43.3	43.4	R
				51.9	49.4	51.5	S

c) female population

CAEN Rev.1	2002	2004	2006	2008	2009	2010	CAEN Rev.2
	<i>Conform CAEN Rev.1</i>			<i>Conform CAEN Rev.2</i>			
Female							
TIA	22.5	25.7	23.9	22.4	23.8	27.4	TIA
TEA	12.0	19.1	17.3	14.9	16.8	21.8	TEA
A	39.2	39.4	39.0	39.6	39.5	39.6	A
C	14.5	22.0	15.3	14.0	15.8	19.4	B
D	11.1	17.7	15.5	11.8	13.4	19.0	C
E	10.5	17.4	13.6	13.5	13.4	16.9	D
F	15.3	21.7	20.3	23.4	30.8	35.1	E
G	13.5	20.2	19.5	16.6	19.7	25.9	F
H	9.7	14.6	14.8	16.9	18.1	21.7	G
I	11.4	18.1	17.9	15.6	18.2	25.4	H
J	11.9	19.8	20.8	14.7	15.8	19.3	I
K	18.9	23.4	24.0	18.2	20.2	26.4	J
M	11.0	20.5	18.2	17.2	18.8	22.0	K
N	12.0	19.8	19.1	34.3	35.3	38.1	L
O	34.5	49.9	46.6	18.5	20.9	24.4	M
				24.3	25.8	33.8	N
				15.1	18.5	23.5	P
				16.6	20.0	24.9	Q
				16.4	25.7	30.5	R
				42.3	42.9	49.6	S

Source: INS, Labour market statistics and own calculations

Where:

TIA – Total population, including agricultural sector

TEA – Total population, excluding agricultural sector

Classification of Activities from National Economy - CANE Rev.1

A	Agriculture, hunting and forestry (including B – fishery)	I	Transport, storage and communications
C	Mining and quarrying	J	Financial intermediation
D	Manufacturing	K	Real estate, renting and business activities
E	Electricity, gas and water supply	M	Education
F	Construction	N	Health and social work
G	Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	O	Others activities of national economy (including collective, social and personal services, private households)
H	Hotels and restaurants		

Classification of Activities from National Economy - CANE Rev.2

A	Agriculture, forestry and fishing	J	Information and communications
B	Mining and quarrying	K	Financial intermediation and insurance
C	Manufacturing	L	Real estate transactions
D	Production and supply of electric and thermal energy, gas, hot water and air conditioning	M	Professional, scientific and technical activities
E	Water distribution; sanitation, waste administration, decontamination activities	N	Activities of administrative services and activities of support services
F	Construction	P	Education
G	Wholesale and retail; repair of motor vehicles and motorcycles	Q	Health and social assistance
H	Transport and storage	R	Showbiz, cultural and recreation activities
I	Hotels and restaurants	S	Other activities of national economy (including collective, social and personal services, private households)

Table 2. Distribution of employment in informal sector by economic activities

a) total, male and female population

CANE Rev.1	2002		2004		2006		2008		2009		2010		CANE Rev.2
	According to CANE Rev.1						According to CANE Rev.2						
	TIA	TEA	TIA	TEA	TIA	TEA	TIA	TEA	TIA	TEA	TIA	TEA	
Male and female													
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	Total
A	59.8	-	47.3	-	47.5	-	47.5	-	43.4	-	40.2	-	A
C	1.0	2.6	1.2	2.3	0.8	1.5	0.7	1.3	0.8	1.4	0.8	1.4	B
D	11.9	29.6	15.7	29.9	13.5	25.7	11.2	21.4	11.6	20.4	12.4	20.7	C
E	1.1	2.8	1.3	2.5	1.1	2.2	0.6	1.2	0.8	1.4	0.8	1.4	D
F	4.0	9.9	4.9	9.3	5.8	11.1	0.9	1.6	1.1	2.0	1.2	2.0	E
G	7.3	18.1	9.5	18.1	10.5	20.0	9.1	17.4	9.2	16.3	9.5	15.9	F
H	0.7	1.7	1.1	2.1	1.0	2.0	11.2	21.4	11.3	20.0	11.4	19.1	G
I	3.2	8.0	3.7	6.9	3.6	6.9	3.1	5.9	3.7	6.5	3.8	6.4	H
J	0.4	1.1	0.7	1.4	0.8	1.6	1.2	2.2	1.3	2.3	1.4	2.3	I
K	1.7	4.1	2.6	5.0	3.1	6.0	1.0	2.0	1.3	2.3	1.4	2.3	J
M	2.5	6.2	3.8	7.2	3.5	6.7	0.9	1.7	1.0	1.8	1.1	1.9	K
N	2.1	5.2	3.2	6.0	3.2	6.1	0.3	0.6	0.3	0.6	0.4	0.6	L
O	4.3	10.6	4.9	9.3	5.4	10.3	1.4	2.6	1.7	3.0	1.8	3.0	M
							1.7	3.3	2.1	3.8	2.3	3.8	N
							3.1	6.0	3.6	6.4	4.0	6.6	P
							3.0	5.7	3.6	6.3	4.0	6.6	Q
							0.4	0.8	0.6	1.1	0.7	1.1	R
							2.6	5.0	2.5	4.3	2.9	4.8	S

b) male population

CANE Rev.1	2002		2004		2006		2008		2009		2010		CANE Rev.2
	According to CANE Rev.1						According to CANE Rev.2						
	TIA	TEA	TIA	TEA	TIA	TEA	TIA	TEA	TIA	TEA	TIA	TEA	
Male													
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	Total
A	54.0	-	45.5	-	45.5	-	42.8	-	38.1	-	36.5	-	A
C	1.6	3.5	1.8	3.4	1.2	2.3	1.0	1.8	1.2	1.9	1.3	2.0	B
D	12.8	27.7	15.4	28.2	12.9	23.7	11.4	20.0	12.3	19.8	12.8	20.1	C
E	1.7	3.6	1.8	3.3	1.5	2.8	0.9	1.5	1.1	1.8	1.1	1.8	D
F	6.6	14.3	8.2	15.1	9.8	17.9	1.1	1.9	1.5	2.4	1.6	2.5	E
G	7.8	16.8	9.4	17.2	10.4	19.1	15.1	26.4	14.8	23.8	15.3	24.1	F
H	0.6	1.4	0.9	1.6	0.9	1.6	11.0	19.3	11.2	18.1	11.1	17.4	G
I	4.6	10.1	5.1	9.3	5.0	9.1	4.4	7.6	5.1	8.3	5.3	8.3	H
J	0.3	0.7	0.4	0.8	0.5	0.9	0.9	1.5	1.0	1.6	1.0	1.6	I
K	2.1	4.5	3.2	5.9	3.6	6.7	1.2	2.1	1.5	2.5	1.6	2.5	J
M	1.8	3.8	2.3	4.2	2.0	3.7	0.5	1.0	0.7	1.1	0.7	1.1	K
N	1.1	2.3	1.4	2.6	1.4	2.6	0.3	0.5	0.4	0.6	0.4	0.6	L
O	5.1	11.2	4.6	8.4	5.3	9.7	1.3	2.3	1.7	2.8	1.8	2.8	M
							2.1	3.7	2.7	4.4	2.9	4.5	N
							1.9	3.3	2.4	3.8	2.5	3.9	P
							1.2	2.2	1.7	2.7	1.7	2.7	Q
							0.4	0.6	0.6	1.0	0.6	1.0	R
							2.4	4.3	2.1	3.3	1.9	3.0	S

c) female population

CANE Rev.1	2002		2004		2006		2008		2009		2010		CANE Rev.2
	According to CANE Rev.1						According to CANE Rev.2						
	TIA	TEA	TIA	TEA	TIA	TEA	TIA	TEA	TIA	TEA	TIA	TEA	
Female													
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	Total
A	67.2	-	49.6	-	50.0	-	53.8	-	51.0	-	45.4	-	A
C	0.3	0.9	0.4	0.8	0.3	0.5	0.2	0.5	0.2	0.4	0.2	0.5	B
D	10.8	33.0	16.2	32.0	14.1	28.3	11.0	23.8	10.6	21.6	11.9	21.8	C
E	0.5	1.5	0.7	1.4	0.6	1.3	0.4	0.8	0.4	0.8	0.4	0.8	D
F	0.7	2.0	1.0	1.9	1.1	2.2	0.5	1.1	0.6	1.2	0.7	1.2	E
G	6.7	20.4	9.7	19.2	10.6	21.3	1.3	2.7	1.4	2.8	1.5	2.7	F
H	0.8	2.3	1.3	2.7	1.3	2.6	11.4	24.7	11.4	23.3	11.9	21.8	G
I	1.4	4.1	1.9	3.8	2.0	4.0	1.5	3.2	1.7	3.4	1.8	3.3	H
J	0.6	1.9	1.1	2.1	1.3	2.5	1.6	3.4	1.7	3.4	1.8	3.4	I
K	1.1	3.4	2.0	3.9	2.5	5.0	0.9	1.9	0.9	1.9	1.1	2.0	J
M	3.4	10.4	5.6	11.2	5.3	10.6	1.4	3.0	1.5	3.1	1.7	3.1	K
N	3.4	10.4	5.2	10.4	5.4	10.7	0.3	0.6	0.3	0.5	0.3	0.6	L
O	3.2	9.7	5.3	10.6	5.5	11.0	1.5	3.1	1.7	3.5	1.8	3.3	M
							1.1	2.5	1.3	2.6	1.5	2.8	N
							4.8	10.3	5.4	11.0	6.0	11.0	P
							5.3	11.4	6.3	12.9	7.1	12.9	Q
							0.4	1.0	0.6	1.3	0.7	1.3	R
							2.9	6.2	3.0	6.2	4.2	7.7	S

Source: INS, Labour market statistics and own calculations

Where:

TIA – Total population, including agricultural sector

TEA – Total population, excluding agricultural sector

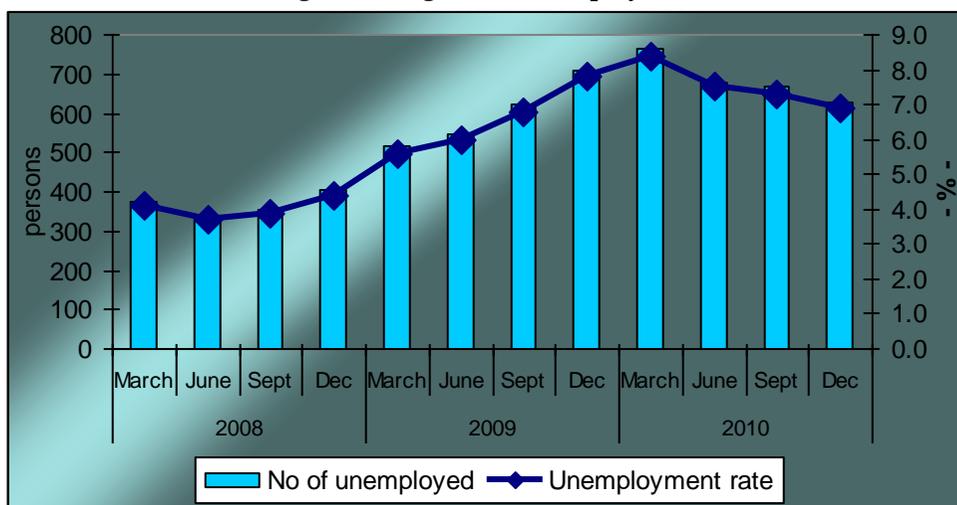
Classification of Activities from National Economy - CANE Rev.1

A	Agriculture, hunting and forestry (including B – fishery)	I	Transport, storage and communications
C	Mining and quarrying	J	Financial intermediation
D	Manufacturing	K	Real estate, renting and business activities
E	Electricity, gas and water supply	M	Education
F	Construction	N	Health and social work
G	Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	O	Others activities of national economy (including collective, social and personal services, private households)
H	Hotels and restaurants		

Classification of Activities from National Economy - CANE Rev.2

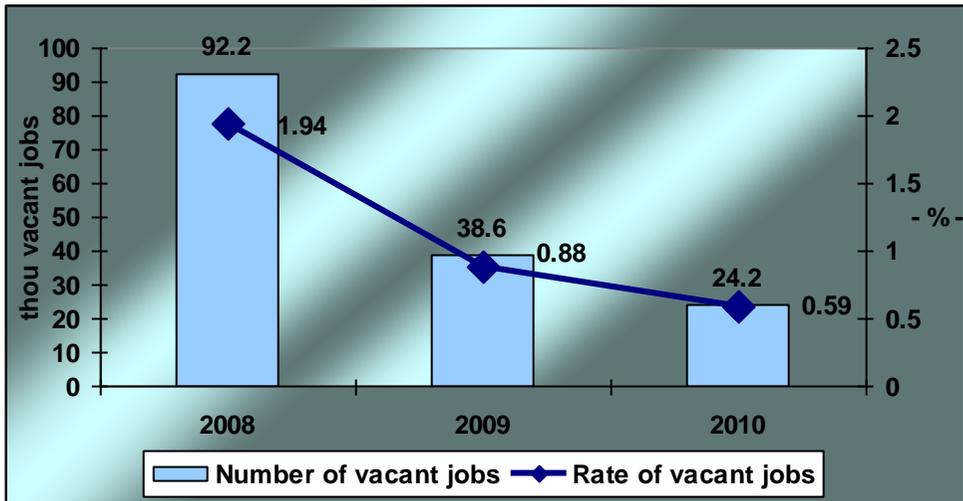
A	Agriculture, forestry and fishing	J	Information and communications
B	Mining and quarrying	K	Financial intermediation and insurance
C	Manufacturing	L	Real estate transactions
D	Production and supply of electric and thermal energy, gas, hot water and air conditioning	M	Professional, scientific and technical activities
E	Water distribution; sanitation, waste administration, decontamination activities	N	Activities of administrative services and activities of support services
F	Construction	P	Education
G	Wholesale and retail; repair of motor vehicles and motorcycles	Q	Health and social assistance
H	Transport and storage	R	Showbiz, cultural and recreation activities
I	Hotels and restaurants	S	Other activities of national economy (including collective, social and personal services, private households)

Figure 4. Registered unemployment



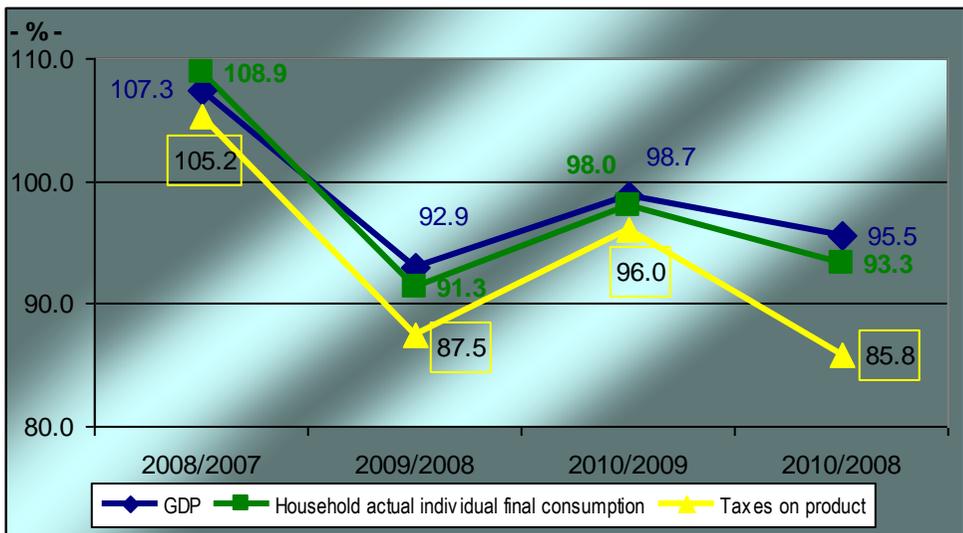
Source: National Agency for Employment (ANOFM in original)

Figure 5. Number and rate of vacant jobs



Source: INS, Statistics on job vacancies

Figure 6. Macroeconomic indicators



Source: INS, National Accounts and own calculations

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YOUTH LABOUR MARKET. MOBILITY, CAREER DEVELOPMENT, INCOMES. CHALLENGES AND OPPORTUNITIES

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This paper presents the main characteristics of the youth labour market, with a special view on mobility, career development and incomes. The paper is substantiated by and continues the researches of the authors on the topic of labour force mobility and on the one of adaptability, respectively on youths' behaviour on labour market (with particular consideration of young graduates) highlighting the factors that adjust choices regarding taking up a job, career advancement, labour motivation, professional and personal satisfaction opportunities which are provided by the labour market at local level, in country and abroad. Quantitative and qualitative indicators are presented about Romanian youths' labour market within the European context during the transition period. The impact of the crisis on youths' labour market is analysed, highlighting the challenges and opportunities, the particularities of the newly created jobs and especially the knowledge, skills and competencies requirements (KSC). The authors propose both the improvement of the systems of indicators for defining the potential and presence of youth on the labour market, the economic and social impact of external mobility of young graduates and an integrated scheme of policy measures for promoting adaptability and performance integration on Romanian labour market of youth. Particular attention is paid to presenting policy instruments for halting/diminishing the brain drain and brain shopping phenomena by promoting an attractive (professionally and monetary) supply for employment in Romania's local economy. The authors succeed in highlighting the functional links between the education market (labour force supply) and labour market (employment demand of the business environment) underpinning the requirement of integrated management of labour potential in the years preceding studies' finalization and up to the post-insertion years by multi-criteria analysis models and graduate career tracking programmes. Correlative measures are suggested for policies, procedures and monitoring instruments of youths' adaptability on labour market, as alternative to external migration/mobility for labour.

Keywords: labour market, education market, young graduate adaptability, labour mobility, career development

JEL classification: J40, I20, J61, I25

I. Introduction

Youth employment is much more volatile than the one of mature labour force. *Youth labour market is characterised by opportunities' deficit for decent employment, diminishing jobs, employment precariousness (increases in the number of part-time jobs, temporary employment) and wages' reduction.* Young people are faced also with increased difficulties on entering the labour market, considering that also during the economic expansion period there were already issues related to the creation of new jobs for them. The lack of employment perspectives in a decent job on entering the labour market affects/compromises their path on labour market and career development. Additionally, *unemployment among young individuals presents specific vulnerabilities – higher sensitivity to the variations of economic activity, difficulties in creating new jobs for youth, longer duration of the unemployment period, and easier entry on the informal*

labour market, which turns into a true refuge, particularly for graduates. Experts' estimations appreciate that an increase in total unemployment rate by 1 per cent is accompanied by an employment diminishment among youth of about 1.1 – 1.8 per cents, and Romania is one of the EU Member States with the highest unemployment rate of youth and its increase is expected (about 3 times higher than the general unemployment rate). The crisis “generates” precarious jobs for youth, which are weakly remunerated very often under their skills' level, triggering loss/depreciation of competencies, or long-term unemployment and discouragement, hence increased poverty incidence.

Considerable numerical and structural gaps are present on labour market between supply (outcome of education for vocational training) and demand (job requirements on the national labour market), which are amplified in some fields by the free movement of labour force (attractiveness of some better paid jobs, not necessarily in the same training field), so that a significant deficit emerges for skilled staff in fields such as constructions, industry, services, including here health care ones, while on the European labour market our citizens deliver preponderantly low/un-skilled labour.

On the education market, the curriculum adjustment and the range of skills on professions and fields of sciences has low flexibility, remaining behind as considered from KSCs demanded on labour market, and the link between school and business environment is erratic, punctual, or inexistent in most field (lack of cooperation for practice, internship, etc. and the system of scholarships provided by the business environment among graduates is strongly unbalanced tending to being inexistent). The difference between the demand on labour market and the supply of labour from among the graduates is strongly imbalanced, in most cases a period of training is necessary for labour market insertion of the graduates (either on the job or by courses provided by authorised institutions for adult education on the LLL market, and by courses of the National Council for Adult Training -NCAT).

In the current paper we intend to highlight the fault lines between the educational system and the labour market and to present an integrated system of instruments and support mechanisms for dynamic balancing of the labour demand and labour supply represented by the insertion of young graduates.

II. Literature review

Youth adaptability on labour market, their professional insertion and the KSCs deficit are issues widely debated by experts, particularly as outcome of the propagated effects on long term which they generate. Young people enter the labour market unprepared, without practical skills, their theoretical knowledge is either outdated or incomplete, and their basic competencies – generic and specific – are weakly developed (Vasile, V., 2009). The transition from school to active life and labour integration of youth represents an essential issue with a strong economic and social impact as it is also an important measurement of the external efficiency of the educational system (Vasile, L., 2011). The concerns in order to promote (performance) employment of youth, and the efforts of integrating young people on the local labour market were intensified during the period of crisis, and at EU level were realised a series of studies and researches of the various aspects regarding this issue (EU, 2011). Additionally *EU 2020*, integrates in the development targets both young generation's participation to education to a share of 40%, and a diminishment of early school leaving under 10%, which are performances difficult to reach by Romania (from 16 % in 2008 the intention is to increase to almost 27% in the case of the share of graduates of tertiary education aged from 30-34 years and also from 15,9% in the same year to reduce to 11,3% the rate of early school leaving). At the same time, EC, by “Youth on the move” proposes in 2010 a number of 4 priorities for lowering youth unemployment: support for professional insertion and career development; support for youth in risk situations; promoting a support social network and sustaining entrepreneurship and self-employment. Increased concerns are shown

also at national level by supporting the absorption of structural funds for priority objectives that support youth (adaptability to the labour market, post-doctoral studies, etc.), as well as by developing topical surveys (NIS, 2000, 2009). We still can remind the topical studies realised by various other institutions, based on projects financed with domestic funds, or international ones, yet these provide only for a partial, fragmented image related to the issue of youths on labour market (Nicolescu, L 2002, Săpătoru D Caplanova A & Slantcheva S, 2002)

As result, there is no relevant information source that would aid the education system to permanently adjust/adapt the educational profile to the requirements of the business environment (of the *graduate career tracking program at national level*), and the market allows just for punctual regulation on short-term by CVT courses especially, which does not solve the issue of the anticipative character of the educational system against the labour demand expressed by the real economy. The outcomes of the survey repeated in 2009, associated with the reform measures on both markets (education and labour) allow for formulating some conclusions/partial outcomes and may represent milestones for defining the framework for improving the communication relationships/channels between the two systems/markets. Moreover, **there are neither systematic studies nor even a national databank for monitoring the socio-professional insertion of graduates on labour market in the first years by highlighting the dysfunctions in forecasting educational content, and an adequate system of indicators that would allow for evaluating the impact of the university system on the Romanian economy and society is non-existent, as well.** Only fragmented studies are made at the level of individual universities, without an attempt of aggregating the outcomes. The requirement of such approaches and the first national initiatives were rendered concrete in developing a methodology and working instruments regarding monitoring studies of insertion on labour market for higher education graduates from Romania (MECT, 2008), which were applied for the first time by means of a pilot project initiated within SOPHRD (Damian, R.M., 2011). The questionnaire developed on this topic is applied to a restricted target-group represented by graduates of state- and private higher education institutions after one year, and then after five years since graduation, but only for the universities involved in the implementation of the study.

III. Youth labour market. Main characteristics and development

In the context of the economic transition process, the labour market from Romania was faced with important changes, shown in the diminishment of the active and employed population, in the increased unemployment among young individuals and growth of long-term unemployment, in the limited capacity of the economy to create new jobs and to ensure stimulative work remuneration in accordance with performance and importance of supplied work, by the lack of attractiveness of the jobs for young graduates, particularly for those finishing tertiary education. As result, labour mobility increased especially external mobility of workers, and the stock of migrant population is estimated currently to total almost 4 million persons (in the registered and unregistered economy).

Labour market reform and the changes in the human capital management model from Romania have known a sinuous development, much delayed as compared with the demands of the economic and social environment. This issue was left on a secondary plane, as it was considered that the regulations on the other markets will generate the required changes to ensure labour market functionality. **If we consider the requirements of an efficient labour market**, as support for sustaining competitiveness, we may appreciate that the labour market after two decades of reform/adjustment and a period of economic growth of about 8 years: a) *does not ensure an efficient allocation of human capital within the economy, nor its performance use*; b) *the remuneration system is rigid in relation to performance and work involvement*, and does not stimulate to a sufficient extent the additional effort, in particular for the public sector; c) *mobility on fields of activity is relatively low*, even for common professions of the national economy due

on one hand to the rigid recruitment and selection systems of the staff (the criterion of experience is defining in most cases), and on the other hand due to the high differences in the remuneration on branches and fields of activity (especially with respect to the bonuses and advantages system (bonus for the importance of the branch, stability bonus, etc.); d) *opportunities' equalities in career advancement and remuneration* albeit stipulated in regulation documents and development strategies of human resources, the practice shows frequently derails thereof. Hence, we cannot consider efficiency and flexibility on labour market as support factor of competitiveness (the seventh pillar "labour market efficiency", Global Competitiveness Report 2009-2010), and as positive input to increasing economic growth and sustainable human development, to retaining young graduates on the national labour market and decreasing migration propensity.

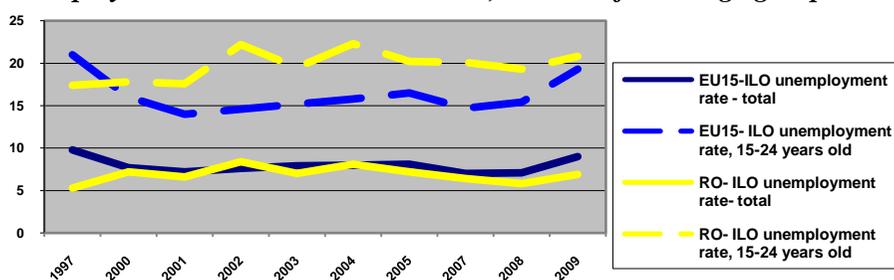
During the entire transition period is recorded a diminishment in the size of labour market associated with higher flexibility but on the background of increasingly stronger **de-correlation** under the quantitative and qualitative aspect between labour demand and supply, especially on the labour market segment specific for young graduates. Low concerns exist for the efficient allocation of labour force at local level, by stimulating through active measures internal mobility for labour. The concentration of investments in high-density population urban areas and the lack of instruments for supporting internal mobility for labour (living and/or transport conditions) triggered increasingly stronger decoupling under quantitative and qualitative aspect between demand and supply for labour at regional/local level. **Temporary migration for labour is preferred by working-age household members, particularly the young individuals aged up to 35 years, instead of territorial mobility of the household or commuting. Very often deficits are encountered on some markets and labour force surplus on trades/professions on others, the differences being covered rather by external migration flows (emigration of Romanians to Western Europe, Israel or Canada, and immigration from the East on the local labour markets, especially the ones in Moldova and in the central region of the country).** Unfortunately, to a large extent, such balances are made due to the informal market, the benefits being partial both for employees (wages but without social insurance), and employers (lower costs but without instruments for long-term incentives for performance and labour involvement), and also for the society (reduced contributions to social funds and unpaid taxes).

The crisis period generates significant changes on labour market, in the opinion of social partners, disruptions and atypical developments, non-performance and actual restrictions in the way of economic turnaround. The previous economic growth is proven as unsustainable and the Romanian economy drops by more than 7% in 2009 and yet another about 1.5% in 2010. The constriction of economic activity triggers considerable unemployment in the private sector but also personnel reductions in the public sector, but on administrative criteria of diminishing personnel expenditures (budgetary corrections are operated uniformly on ministries). The number of governmental agencies are reduced by half, yet ministerial structures increase, reductions are made in education, health care and research strictly on economic reasoning, without defining the medium- and long-term needs both for quality and efficient educational and health services, as well as for technological progress within the business environment, as solution for exiting the crisis and economic turnaround. The European principles of supporting continuing learning and stimulating the generation of RDI outcomes applicable within economy are acknowledged as necessary, yet unsupported in practice, employment is practically blocked by the lack of demand from the business environment and administrative layoffs within the public sector. Unemployment increases, the active measures on labour market are even more downsized (the level from the period of economic growth varying around 2% in total unemployment fund, for instance) and employees participation to CVT decreases dramatically (Romania was placed on the last position in the EU with a participation to CVT courses of about 1,3% in the last 2 years.

Unemployment among youngsters is higher than the average, about 2-3 times, and higher for men. Young people are predominant among unemployed who never worked and they represent a third of the long-term unemployed.

The youth labour market is different as challenges and restrictions, being more vulnerable to migration “attractiveness”. Young individuals represent the most mobile segment of migrant population, especially for external migration. Aspirations about incomes and professional career and the relative independence from family (single, or without children) make them be more open towards jobs at longer distances, if they satisfy expectations. On the other hand, the situation of youth on labour market is difficult as they are regarded a vulnerable group: they have more difficulties in finding a job due to lack of working experience (in Romania only a small share of the young are employed during their university studies and only few, by exception, during the period of upper-secondary studies). In the last years, e-jobs mobility and increasing part-time employment already during the period of study have attenuated the pressure on insertion unemployment rate.

ILO unemployment rate in Romania and EU, total and for the age group 15-24 years

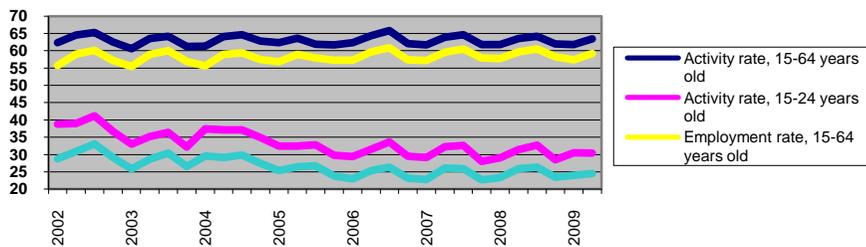


Sursa: Eurostat (2009), <http://epp.eurostat.ec.europa.eu/portal>.

The youths employment model is defined by the following *characteristics*: part-time jobs, contracts on determined periods of time, high mobility from one job to another in the first year after finalising studies, diminished wages towards the legal limit for the graduated level of studies, dual employment, or only within the informal economy, low perspectives of access to a career in the first years, practical competencies and skills deficits triggering inclusively employment in inferior jobs to the training received in school. All these aspects define a non-performance and weakly stimulating model for stability, career advancement and personal development. At an employment rate of the working-age population (15 to 64 years) of about 60% in Q3 2009, were employed 26% of the young individuals (15 to 24 years of age). The highest employment level is among graduates of higher education (84,6%) for the same period and decreases to about 45% for those with the lowest training levels (NIS, 2009). As fields, youngsters aged 15-24 years are employed preponderantly in constructions, trade, hotels and restaurants, and those from the age group 25-34 years of age in real estate transactions and trade. Men are best represented within all socio-professional categories, partially justified also by the fertile life span of women and hence the lower share of participation to labour market.

The activity rate and the employment rate for youths aged 15-24 years is lower than the national average, due to: reduced population cohorts (as result of demographic decline), to extended education period, to poor employment attractiveness provided by the market and to the national employment model which does not promote youth employment during the period of studies, save by exception.

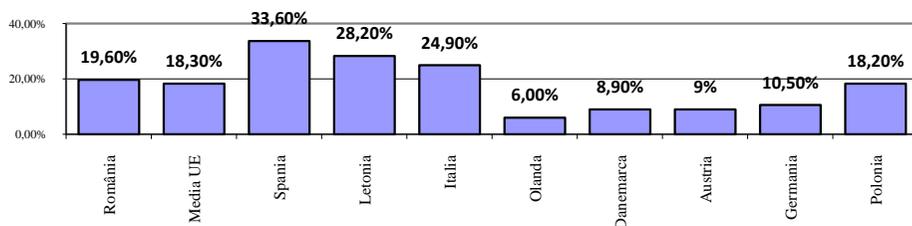
Youths activity and employment rate, 2002-2009



Source: *Labour force in Romania – employment and unemployment– Q 2, 2009, NIS*

Consequently, the two rates are placed about 20 pp under the general average. At the same time, against the Lisbon objectives, the working-age population employment rate in 2008 places Romania at a distance of 11 pp (70%), and for the women at a distance of 7,5 pp (60% objective). Secondary education graduates have an employment rate varying on averages around the national values, the employment rate in the rural area being in reversed proportion to the education level in the case of pre-university levels of study, and the opportunities provided by the rural area being in (paid or unpaid) activities developed in agriculture. Estimates (CEDEFOP, 2008) show that up to the year 2015, approximately 30% of the jobs shall require higher education and almost 50% at least upper-secondary education with a significant decrease of the jobs requiring a low skill level. Professional insertion of a graduate is strongly influenced by the attended school, the field of study, the economic development level of the region, the firms/companies in whom he/she effected internship or worked during studies, the recruitment firms where he/she sustained interviews, on the attended conferences and trainings, etc. Occupational guidance already during high-school of youngsters towards the professional profile and choice of university training in relationship to the intended trade/profession for career development, correlated with gained aptitudes and competencies, but also with the demand on labour market trigger a higher employment rate of graduates and less time searching for a job “adequate/corresponding” to individual aspirations. From this perspective, employment opportunity is in reverse proportionality to the sum of self-imposed restrictions of the graduate. This is also the reason why for young individuals (15-24 de year) the long-term unemployment rate (unemployment of 6 months or over) was, for instance in Q3 2009 of 10,4% , and the incidence of long-term unemployment among youths of 46,9% (at an average unemployment rate of 6,8% per total and of 22,3% among those aged between 15-24 years). Women have an unemployment rate by approximately 30% lower as compared with men. However, they register an enrolment rate in high-school, respectively tertiary education significantly higher than the one of men, a situation which explains the lower employment rate which is specific to them (Vasile V., 2009).

Share of the young unemployed at the half of the year 2009



Source: *Eurostat on-line database*

If we refer to action methods on the labour market, the youth is more incisive and resort to direct and modern methods in searching for a job, take more risks at an interview and the negotiation of working conditions and incomes. Between finishing school and taking up an activity at the first significant job, 74.1% have searched a job using active methods (direct contacting of employers or of the decision factors responsible with hiring 37.9%). The insertion rate of tertiary education graduates is lower against the average situation per total youth who are hired and particularly in the first year after graduation, due to the fact that an university graduate will search longer and have higher expectations with respect to the workplace – under the aspect of the professional profile of the workplace and of the provided remuneration level (very often much lower than graduates' expectations). Even though the state grants tax facilities on employing youths (for instance, the employer will receive for a 12 months period the minimum wage on economy) due to the complementary conditions (including the obligation to remain on the job for at least 2 years) and of the high mobility of youths in search for the right job corresponding to their professional aspirations, the share of those resorting to these facilities is very low. On medium- and long-term, job security for youths with tertiary education is relatively higher, but also the opportunities for mobility based on employment advantages are more. In general, young graduates are considered on insertion on the labour market as having the disadvantage of lacking experience, yet the advantages are net superior: potentially high productivity, adaptability and acceptance of novelty, theoretic knowledge, so as to be considered “relatively cheap”, as lack of experience diminishes the level of the insertion wage towards the minimum legal limits. The hampering lack of experience can be relatively easily dealt away with by training on the job, which depending on trade and skills level attracts lower or higher continuing training costs. Yet, these costs are absorbed on medium-term by individual outcomes and performance, if there is employment motivation. Job motivation and satisfaction are very important components for graduates and youths in general, and therefore they turn easier into unemployed and search for a relatively longer period of time an adequate workplace. Consequently, the unemployment rate for the age group 25-34 is closer to the average one, which leads to the idea that youths after graduation have a short period of feverishly searching a job, with frequent changes and alternating unemployment and employment periods, until succeeding to find a job or to migrate for employment outside the country.

IV. Ways of diminishing discrepancies between demand and supply on youths' labour market. Milestones for an integrated balance model for insertion employment

Youths on labour market remain a disadvantaged group, and as risk are considered: a) for the society as unemployment on local/national market and their migration as brain drain/brain shopping lead to waste of resources due to the non-valued investment in education done in the country and loss on medium- and long-term average of GDP and diminishment of natural increase; b) for the labour market, in event they fail to get employment according to their training profile and in a professionally and financially attractive job. The profile of the young worker is defined on a hand by education (knowledge and theoretic competencies, especially), occupational flexibility, availability for LLL and, on the other hand, the attitude (to work, job, professional career, status on labour market: employed, self-employed, etc.); geographic mobility. The size and balance on labour market are defined by the medium- and long-term trends: demographic decline by delays in family grounding and in the decision to have children, mobility for career and incomes – geographic or virtual – employment volatility, entrepreneurship development and self-employment, lower elasticity by unemployment, increase in the stock of incorporated education and permanent updating by LLL, gender convergence on trades, professions, specialisation fields, including at managerial level and presence in the political life, the interest for developing a successful professional career.

An integrated model for ensuring mobile balance on labour market presupposes at least three components: education for labour market as integral part of LLL, defining the business environment demand by means of KSCs and ensuring a social network of stimulating employment on local/national market. For each component a number of indicators for quantitative measurements can be defined and then weighted/adjusted with the qualitative variables resulting from dedicated surveys (graduated track survey and labour market for youth questionnaire). The selected variables were of 3 up to 6 for each component depending on the demanded training level for the job and scarcity of the specialists. In the case of a job for a tertiary education graduate, as minimum quantitative indicators were defined: a) for the education for labour market component were considered the number of graduates on specialties, the aggregated index of generic competencies and the KSCs index specific to the profession and hierarchical level of the job; b) for defining the labour demand within the business environment was considered the specific demand of similar jobs, workplace stability and the substitution index of the professional profile; finally, for c) social indicators of stimulation, at least at the comparative level of wages and additional wage packages can be considered the geographic indicator (defined by the rural/urban environment) and the local development level (GDP/area inhabitant or the development lag against the national average). Balancing the values of aggregated indicators on each component indicate the compatibility state and attractiveness of employment for youths, while the imbalance situations points out the migration risk – brain drain/brain shopping or the employment option by substitution (another professional profile but for which minimum competencies are proven for taking up the job). The job experience variable non-specific to young graduates and the advantages of the employer from insertion employment are considered in operating selection of equivalent candidates (IEN, 2010). Albeit in the incipient stage of developing and testing on youth market, this algorithm allows on one hand for guiding the educational system to curricula adjustment and focusing learning outcomes on KSCs demanded on labour market, and on the other hand in guiding employers towards recruitment from the local market or from the national/international market, as well as to the association with the development on variants of employment of the e-work type for some trades/professions and, respectively jobs. The current developments and dysfunctions on the youth labour market, particularly during the period of crisis when the volatility elements were more prominent, support the need of developing ex-ante and ex-post management mechanisms of potential (youth) labour force employment by combining counselling and professional guidance with internship periods and graduate tracking management, employer/alumni engagement strategies, industrial relations development and stimulative wage package, LLL, career development model, etc.

V. Brief conclusions

The labour market, respectively the business environment is more exigent in the case of the young labour force which enters labour market after graduation. Youths have more difficulty in finding a job corresponding both professionally and monetary, the reason why both employment fluctuations from employment to unemployment and vice-versa, and longer periods of unemployment are an important barometer of permanent education system's reform in Romania. Moreover, information about vocational training programmes or for on the job adjustment may provide information about dysfunctions and correlations' lack between the education system and demand on labour market, while the following might be considered as the most significant ones:

- Youths entering on labour market after graduation of secondary or tertiary education live preponderantly in the urban area, and men are more numerous; accessibility of higher education is better for those in the urban area, opportunities closer to the beneficiary and, very often, financial restrictions are the most important.
- The shares of their employment and unemployment against the age group to which they belong has not underwent significant changes, just as the passage rate to higher education which

improved but not to a significant share and, unfortunately, did not generate a proportional improvement of graduates' education quality, but to the contrary.

- Still the diploma is more important than proven skills and knowledge, in particular for the public sector. The business environment becomes gradually increasingly rigid from this viewpoint and requires evidence on hiring of professional competencies' certification, and in their absence, employment is made on a job requiring inferior training and/or the knowledge deficit is compensated by CVT on the job.

- The activity rate decreases, young individuals on one hand postpone entering the labour market, and pursue several educational tertiary paths (often in completely different fields) or continue their studies for masters/doctorate or, on the other hand after graduation (or early leaving) are active on the black market, or migrate for employment in low skilled jobs, inferior to gained education.

- The main reasons of early school leaving are still of current concern, respectively the high cost of schooling (especially for those from the rural area) and/or associated with the need of working for incomes (dependency on families with low incomes or other types of difficulties). An important reason of failing to finalise studies is represented also by the inefficiency of the evaluation/certification systems on graduation which consider inflexible evaluation schemes and less adjusted to the practical finality of education – knowledge verification instead of competencies certification, etc.

- The lack of a flexible, coherent and accessible to all system for continuing training, including by certification/continuation/ and/or transition from the formal to the informal and non-formal system.

- Another issue which is difficult to measure but is particularly relevant under the aspect of compatibility between education market and labour market, between the chosen profession and competencies for practicing this profession in performance conditions is represented by the analysis "first significant job" – under the aspect of professional profile and search duration.

- Finally, another important aspect of individual performance during active life is represented by the informal education related to the behaviour on labour market and professional development. The example of parents and extended family members may define to a significant share the labour market behaviour of young graduates and their professional path.

Failure to acknowledge such aspects in a systematic way and their analysis affect the feedback processes within the educational process, maintaining dysfunctions and gaps between education market and labour market, rendered concrete, finally, by loss of human capital, of investments in education, loss of potential value added as result of non-performance work or giving up work after graduation. The relatively high level of this youths' unemployment rate **emphasises the necessity of a closer link between the educational and vocational system and the labour market**. Finalising and applying methodologies of monitoring young graduates insertion for various educational forms (vocational, upper-secondary, tertiary) is a priority, just as the development of more flexible and efficient systems of organising internship for students. Last but not least, a more careful analysis is expected with respect to the competencies which Romanian employers regard as important for the success of their companies and the adjustment of the educational and vocational supply to them, periodical update of occupational and vocational training standards, and of the educational curriculum in close dependency to the change dynamics on labour market.

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THE EVOLUTION OF ROMANIA'S LABOR MARKET, DURING THE LAST 20 YEARS

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In this paper, the authors will try to analyze the evolution of Romania's labor market, in the last nearly 22 years. More precisely, we will analyze the evolution of the number of employees, the number of pensioners, and the number of unemployed workers, in the mentioned period of time, and we will draw some conclusions.

We consider that the dynamic of the labor market is an important indicator, showing both the economic situation, as well as its future evolution; this is why we have chosen to focus our study on it.

In order to do so, using the data published by the National Institute for Statistics, and the National Agency for Labor Force Employment, we have noticed worrying evolutions for Romania's labor market: a decrease in the number of employees, an increase in the number of unemployed workers and pensioners, as well as an increase in the number of those who, although able to work, do not have and do not officially look for a workplace. In fact, this is a limit of our research, because those persons either work (abroad, or on the "black" market), either do look for a workplace, but are not registered as unemployed workers. Another limit of our research is related to the insufficient explanations related to the evolution of the different indicators. But our purpose was to offer an overview of the labor market for the last nearly 22 years, and to suggest some measures to be taken in the future.

In order to do that, we have analyzed the evolution of the number of employees, the percentage of employees in the population able to work, the evolution of the number of unemployed workers, the evolution of the number of pensioners. Also, we have made a comparative analysis of the evolution of the number of employees and of the number of pensioners.

Through this paper, we have tried to draw attention upon the worrying phenomena taking place on Romania's labor market, as well as upon the fact that our country should take urgent measures in order to increase the number of employees in the economy.

Keywords: labor market, employees, pensioners, unemployed workers, Romania

JEL Classification: E24 Employment, Unemployment; E 26 Informal Economy, Underground Economy

Introduction

During the last nearly 22 years, Romania has gone through major and complex changes, economically, socially or politically. The labor market has been through many changes, as well. Phenomena like unemployment, unknown 22 years ago, have emerged.

But there have been other major changes. On Romania's labor force market, during the last 20 years, a constant and worrying decrease in the number of employees has been registered. If, in 1990, the number of employees was 8 142 000 persons, in 2010, the number of employees was 4 400 000 persons. And the decreasing tendency is, most probably, continuing in 2011, mainly due to the crisis. In the same time, Romania has registered an important increase in the number of pensioners (in 2009, the number of pensioners was with 56% higher than in 1990).

Many studies regarding the labor market have been done, and many will be done. In this paper, the authors tried to update the situation of Romania's labor market, analyzing the data available for 2010. Hereinafter, we will analyze the evolution, between 1990 and 2010, of the number of employees, the number of unemployed workers, the number of pensioners. Also, we have made a comparative analysis of the number of employees and of the number of pensioners.

The number of employees

In Romania the number of employees is continuously decreasing. The evolution of the number of employees is presented in Table 1.

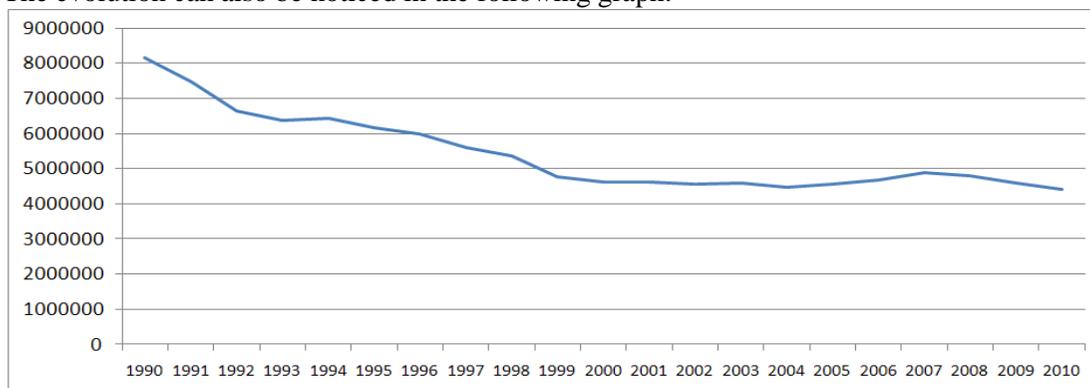
Table 1. The evolution of the number of employees in Romania, 1990-2010

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nb employees	8142	7483	6627	6385	6438	6160	5939	5597	5369	4761	4623
Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
Nb employees	4619	4568	4591	4469	4559	4667	4885	4806	4595	4400	

Source: National Institute for Statistics

As one can notice, the evolution is decreasing; in 2010, the number of employees represents only 54% in comparison to the year 1990.

The evolution can also be noticed in the following graph:



Source: realized based on data from the National Institute for Statistics

Graph 1. The evolution of the number of employees in Romania, 1990-2010

This worrying evolution has many causes:

- A pronounced aging population;
- High migration of the labor force (abroad migration, but also from the urban area to the rural area);
- Undeclared work;
- Economy's incapacity of generating enough work places, after losing traditional markets;
- The high number of retirements (anticipated retirements, illness-based retirements), during the last 20 years;
- Massive lay-offs, in many economic branches, during the last 20 years;
- Professional rigidity, difficult, sometimes impossible reconversion of the labor force.

The migration phenomenon is a complex one, taking into consideration the factors determining it and its consequences. Unlike the natural movement of population, the migration is more difficult to be statistically registered, in order to reproduce as accurately as possible the population's movements. For instance, during the 2002 census, one of the important indicators was represented by the population's residence change, in comparison to the birth county. This

indicator reflects the situation, at a given moment, of migrants, without indicating whether, in time, there have been other residence changes. The typology of those movements can be seen hereby:

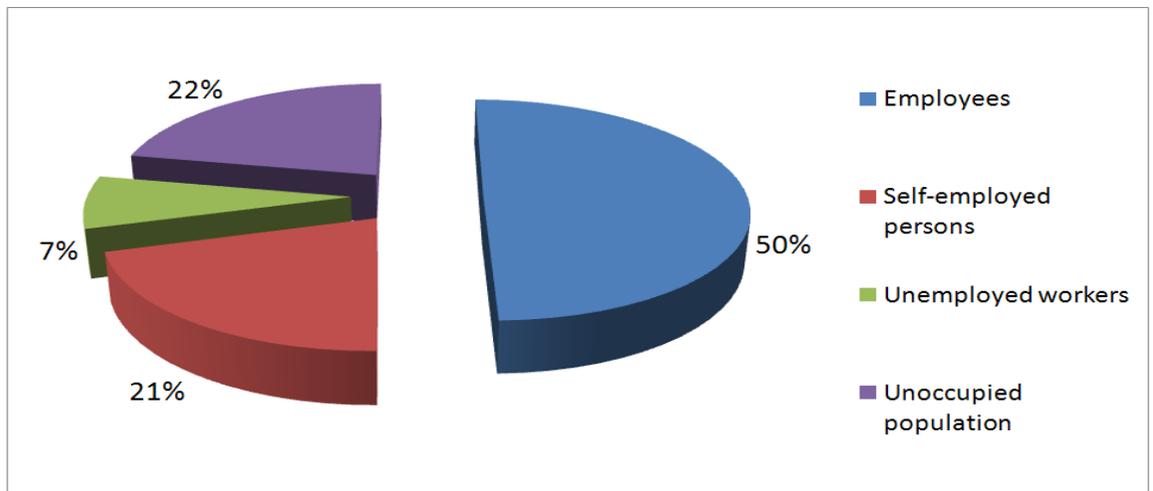
-Definitive movement (residence change);

-Temporary movement (no residence change). These movements can be seasonal or commuting. If we take into consideration destination, the migratory movements can be classified in internal and external movements.

If, until 1989, the most important migratory flow was determined by industrialization, the effect being a high rural exodus (the industrialization has overlapped the structural transformation of the agriculture, through cooperativization, which generated a boost of the labor force), after 1989, one has noticed a come-back flow for a part of the urban population, due to social issues generated by the economic reorganization.

After 1990, in Romania, the external migration has become a social undertaking phenomenon. During this period of time, migration had multiple forms: family reunification, ethnic migration, business migration, increasing students' international mobility, increased brain-drain (especially in the area of IT), or labor migration.

Another worrying phenomenon is represented by the increased percentage of those who, although being able to work, do not have and do not look for a workplace (according to official statistics). If we subtract the employees, the self-employed persons and the unemployed workers from the population able to work, the result is represented by over 2 million persons who do not have a workplace, and who, theoretically, are not looking for a workplace (graph 2).



Source: realized based on data from the National Institute for Statistics and from the National Agency for Labor Force Employment

Graph 2. The different categories of the population able to work

Based on graph 2, we can notice that, from the total population able to work (approximately 9 243 000 persons), some 50% are employees, 21% are self-employed persons, 7% are unemployed workers, and 22% aren't in any category. But where are those people?

Some of them are, most probably, abroad, working, others work on the "black" market, while others are looking for a job, without being officially registered as unemployed workers.

The number of unemployed workers

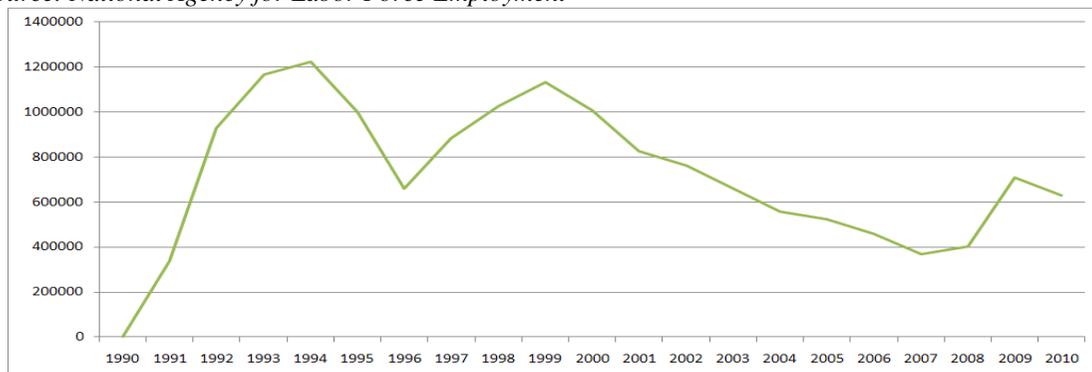
Before 1989, as it is well known, there was no unemployment. Not officially, at least, since every person able to work had the legal obligation to work. In fact, it was a hidden unemployment, taking into consideration the productivity of many employees.

The unemployment phenomenon became known in Romania starting with 1990, when the transition to a market economy has led to the closing of many enterprises. The evolution of unemployment after 1989 (table 2, graphic 3) is in tune with the reforms' evolution, and the Romanian economy's evolution.

Table 2. The evolution of the number of unemployed workers in Romania, 1990-2010

Year	1991	1992	1993	1994	1995	1996	
Nb unemployed	337440	929019	1164705	1223925	998432	657564	
Year	1997	1998	1999	2000	2001	2002	2003
Nb unemployed	881435	1025056	1130296	1007131	826932	760623	658891
Year	2004	2005	2006	2007	2008	2009	2010
Nb unemployed	557892	522967	460495	367838	403441	709383	629960

Source: National Agency for Labor Force Employment



Source: realized based on data from the National Agency for Labor Force Employment

Graph 3. The evolution of the number of unemployed workers in Romania, 1990-2010

Thus, 1993, 1994 or 1999 have been the most difficult years of the transition, characterized by an increase in the number of unemployed workers (graphic 3). Also, 2009, characterized by a negative economic growth, due to the crisis, has registered an increase in the number of unemployed workers.

The emergence and the increase of unemployed workers can be explained by the followings:

- Non-adjustment of labor force professional qualification, to the demands of the labor market;
- Professional rigidity, difficult, sometimes impossible reconversion of the labor force;
- The closing, after 1989, of numerous enterprises;
- The reorganization that took place in the Romanian economy, during the last 20 years.

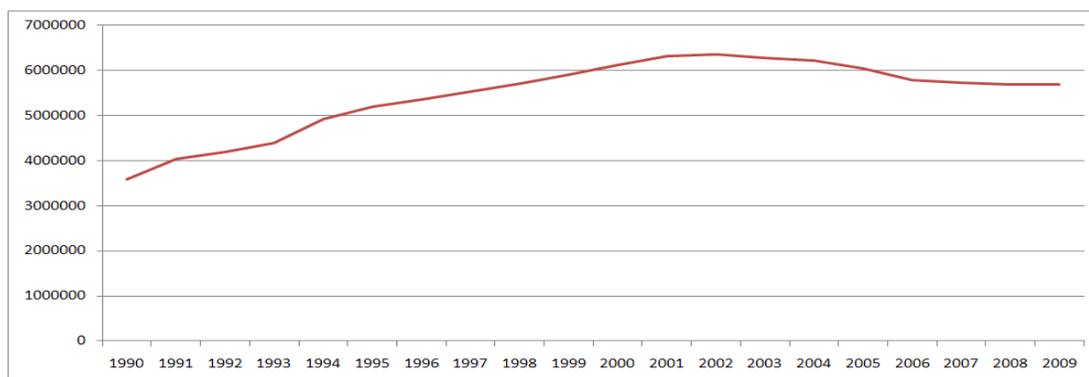
The number of pensioners

Another worrying evolution regards the definitive exit from the labor market, through retirement. Table 3 and graph 4 show that the number of pensioners has increased by 59% in 2009, in comparison to 1990.

Table 3. The evolution of the number of pensioners in Romania, 1990-2009

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Nb pensioners	3577	4034	4200	4392	4917	5187	5352	5524	5702	5894
Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Nb pensioners	6110	6311	6342	6274	6205	6042	5785	5726	5685	5689

Source: National Institute for Statistics



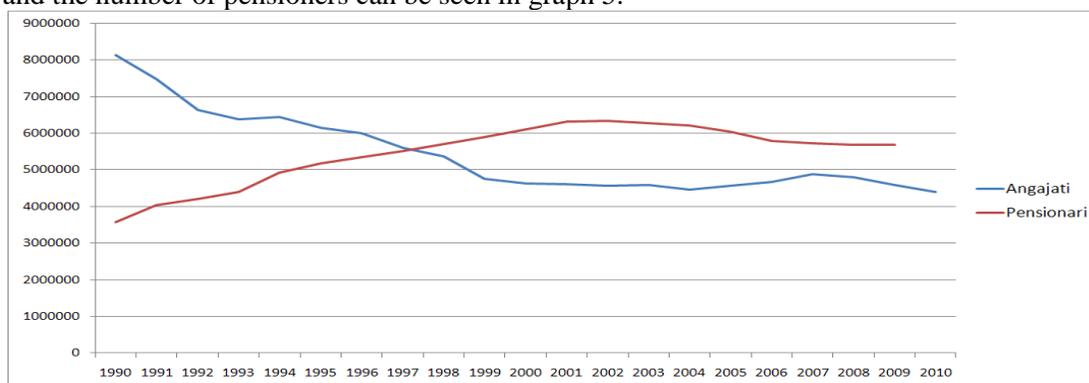
Source: realized based on data from the National Institute for Statistics

Graph 4. The evolution of the number of pensioners in Romania, 1990-2009

The increase in the number of pensioners has several explanations: mainly, the phenomenon of demographic aging, available everywhere in Europe; but, besides this, the situation in Romania has some particularities:

- The high number of retirements, immediately after 1989 (anticipated retirements, illness-based retirements);
- The difficult transition towards a functional market economy has led to the loss of workplaces for persons who were towards the end of their employment; because it has been impossible for them to find another workplace (due to the economic situation, and to their age), they have decided to retire;
- After Romania became a NATO member, in 2004, our country had the obligation of reducing its military body to NATO standards, as dimension and preparation; this led to a reduction, often by retirement, of the military personnel;
- The “baby-boom” generation, born after the Second World War, has reached the retirement age; this will lead to a new increase in the number of pensioners, thing that represents a major risk for the national economy.

But even more worrying is the proportion between the number of employees and the number of pensioners. If, in 1990, each pensioner was supported by 2.27 employees, in 2009, each pensioner is supported by only 0.81 employees. This inversion between the number of employees and the number of pensioners can be seen in graph 5.



Source: realized based on data from the National Institute for Statistics and from the National Agency for Labor Force Employment

Graph 5. The evolution of the number of employees and the number of pensioners in Romania, 1990-2009

This worrying phenomenon is an explanation for the deficit of the pension fund. Even more worrying is the fact that the “baby-boom” generation approaches or has already reached the retirement age, while, on the labor market will enter the generation born after 1989, characterized

by a decreasing birth rate. Which means an increased number of pensioners and a decreased number of those able to work.

Romania's population during the next decades will depend upon the parallel evolution of the birth rate and the mortality rate, as well as upon the level of net external migration (immigration and emigration). If the present values of fertility and of life expectancy remain constant, this would lead to a catastrophic acceleration in the demographic decline.

Conclusions

Romania's population is declining due to the constant reduction in the birth rate, to external migration and to the increase of general mortality; all these together lead to a demographic aging process, which has started to deepen after 2005, when the generations born after 1990 have entered the category of population able to work (15-59 years old). However, the increased dependence ratio of the elderly population will not be very high until 2027, when the "decreaser generations", born after 1967, will reach the category of those being over 60 years old.

In this moment, Romania has too few employees, taking into consideration the total population, and the population able to work. Also worrying is the fact that the economic growth period of time (2002-2008) has created relatively few working places (238 000). Within the next years, solutions are needed in order to bring the "black" labor market to the surface, for several reasons: those people must contribute to the state budget; they must benefit from the unemployment benefit, or medical health care services; they must benefit from a pension, after retirement. Romania must take the necessary measures in order to increase the labor force employment rate. Nowadays, the employment rate is 58%, while the objective of Europe 2020 Strategy is 75%.

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THE SPECIFIC MARKET RESEARCH METHODOLOGY USED AT GENERAL MOTOR'S EUROPE

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As difficult as segmenting consumer markets is, it is much simpler and easier than segmenting industrial markets. Often the same industrial products have multiple applications; likewise, several different products can be used in the same application. Customer differ greatly, and it is hard to discern which differences are important and which are trivial for developing a marketing strategy. Making the research at General Motor's Europe I realized that the most industrial marketers use segmentation as a way to explain results rather than as a way to plan. In fact, industrial segmentation can assist companies in several areas like: analysis of the market, selection of key markets and management and marketing. In this study I tried to make a better understanding of the total marketplace, including how and why customers buy and to develop strategies, plans and programs to profitability meet the needs of different market segments and to give the company a distinct competitive advantage. The Marketing Plan is based on an Information System which can be interpreted in two different ways. In this case its singular form focusing on both formal and informal information system is appropriate. The investigation explains the environment of the European Business Team . The techniques used were: system maps, observations, interviews, questionnaires and company documents. The initial stage of exploring the situation starts usually with a dialog between the potential client - in this particular case the European Business Team – and the analyst. The vague impression is then given that not everything is running as it should be by the client. This was, however, not completely true in my case, as I had to go looking for problems. Preliminary investigations into product communication did show a feeling of unease between the departments. Having expressed the current situation of the European Business Team , I then chose three areas to study further. I had to confirm my choice to be able to grasp the complexity of the working environment

Key words: Marketing plan, market requests

M: Business Administration and Business Economics; Marketing ;Accounting

1.Introduction

It is necessary to complete the conventional fact-finding for any study. For this investigation I used a number of fact-finding techniques. Some fact-finding techniques were not appropriate for every individual, due to the working environment. Fortunately I was able to use a variety of techniques to cover all the information I needed. The assumption was made that the fact-finding, that I completed for the Corsa Team, was also appropriate for the other Business Teams. Observation was probably the most important method of fact-finding for this investigation. Observations included reading memos and messages via Lotus Notes and listening to conversations at meetings and group discussions. Also my interviews allowed two way communication , thus clearing up any misunderstandings. The company documents were used in conjunction with all the other fact-finding techniques to support the later stages of investigation In this study, I evaluated the specific modeling systems used at European Business team (EBT), part of General Motors Europe.

GME was established in 1986 and is a subsidiary of General Motors (GM), which was founded in 1908 by William Durant. Although GM is a well-known car manufacturer, it is not responsible

for manufacturing cars within Europe. This lies with GME. GME consists of Vauxhall, Adam Opel AG and Saab. To enable better co-ordination and to improve the competitive edge of the company, it was decided that the EBT should be located at Adam Opel AG in Russelsheim. This is due to the fact that Russelsheim is the headquarters of both engineering and design.

The EBT follows the organizational structure of GME. This comprises of detailed objectives and goals laid out in a company profile. The EBT, however, is situated at Adam Opel AG. Opel is differently structured and houses other company objectives, which have been formed through many years of existence. In general, the company works on the basis of primary objectives, such as producing cars with a high margin. However, employees have their own objectives, which are based on personal experiences.

2. Investigation

This part of the study discusses two chosen areas which are the Marketing Plan and Market Requests. The area of Product Communication was the subject of another study before.

Using the techniques of Soft System Method (SSM) I constructed root definitions and conceptual models in line with systems thinking. This is then followed by a critical examination of the current cultural situation in the organization.

2.1. Marketing Plan

The Marketing Plan is a document that explains the strategy the organization will use to market its product. The information it uses can be classified as strategic information. It includes information on future markets, on availability of raw materials and on product development, in order to plan for the future.

Its purpose is to force the EBT to use long-term thinking in the attempt to be on step ahead of the competition. In short, it is used to improve the position of the product in the market.

The Marketing Plan is divided into 3 major categories:

Analysis

- Information is gathered on the appropriate areas. This information is compared with previous analysis of market trends.
- There are two forms of analysis.

External

- Current market (size, growth, segments, needs and behaviour)
- Competition (both existing and new)
- Environment (inflation, unemployment, recession, legalities, politics, technology, sociodemographics and culture).

Internal

- Product, brand, capacity, distribution, people & financial resources.

Strategy

- Here is decided which direction will be taken to market the products. The strategy includes a set of objectives for the NSCs to follow. Other aspects are the allocation of resources and the positioning of the product.

Action Plan

- This is a detailed description of the actions needed to implement the strategy. It gives reference to the Marketing Mix (product, price, promotion, people and place), the financial evaluation, and the organizational issue within the EBT and other departments.

A Primary Task Definition and CATWOE of the Marketing Plan

Root Definition

The Marketing Plan is a system in which the Strategists and Marketing Line Managers transform raw data from several sources into a structured Marketing Strategy in the shape of a Marketing Plan for the National Sales Companies to follow. The Strategists and Marketing Line Managers are responsible to the Strategic Director of product Marketing.

The assumption is made that long term thinking improves the company's position and the company is better prepared than the competition. All this is done under the wider constraints of the economical situation, legalities and socio-and cultural demographics.

C - National Sales Companies ; **A** - Strategists, Marketing Line Managers; **T** - Raw data from several sources into a structured Marketing ,Strategy in the step of a Marketing Plan; **W** - Long – term thinking improves the company's position and the company is better prepared than competition; **O** - Strategic Director of Product Marketing ; **E** - Economical situation, legalities, socio-and cultural demographics.

2.2. Market Requests

This was an area of extreme controversy. The EBT experienced major problems with this issue. These problems include such things as disorganization and conflicts of interest.

Market Requests can be considered as another key task for the EBT. However, there are no guidelines set for the NSCs in the area of market Requests. There is no documentation for Market Requests and Market requests are normally done via Lotus Notes, telephone or fax.

Market Requests force the EBT to have direct contact with several other departments, in order to push the requests through. These departments include the Platform Business team (PBT) and Ordering Specification from the European Sales Operations (ESO).

Product Changes

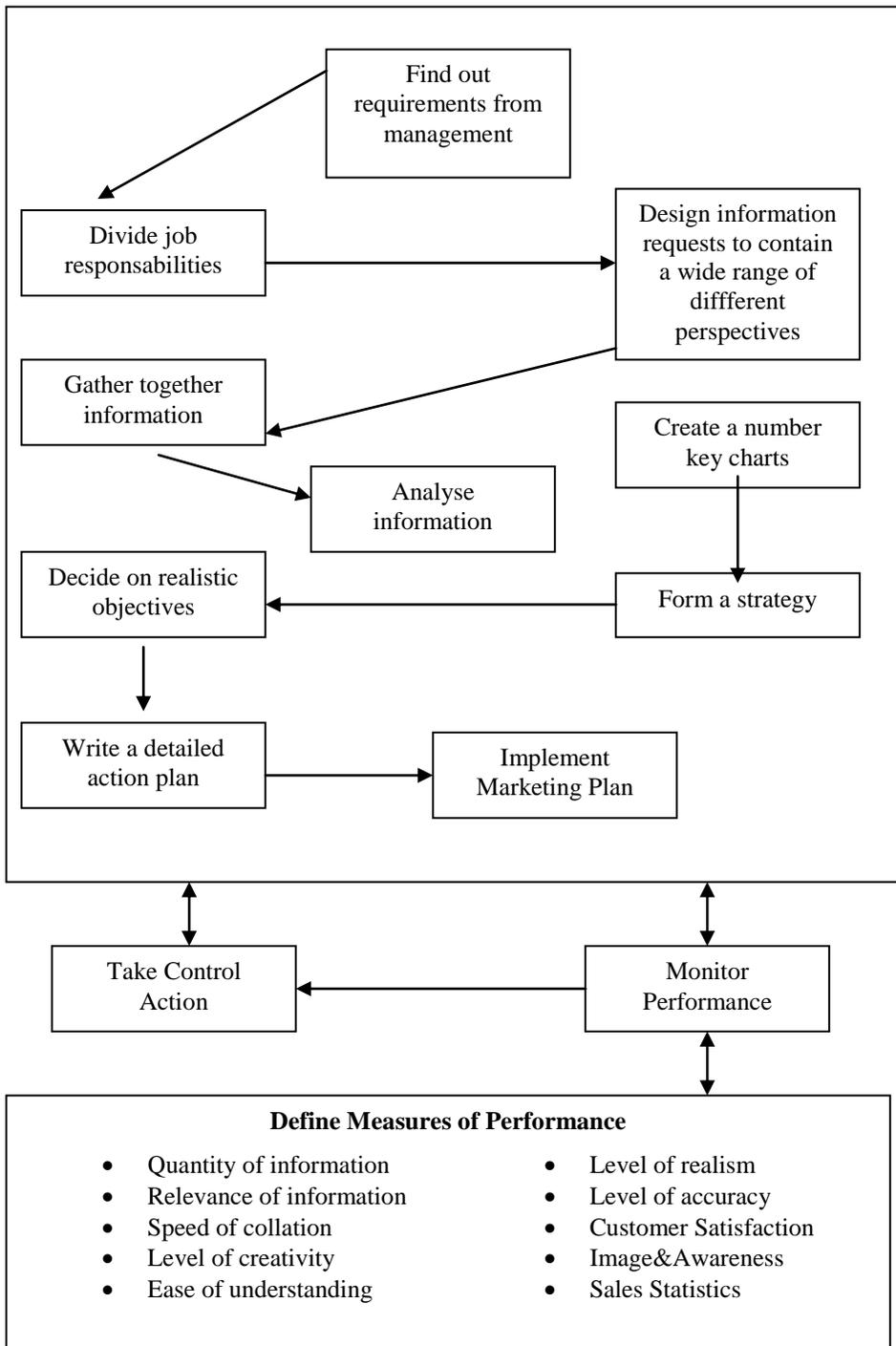
Market Requests are just one way of changing the product offer. Other procedures include quality improvements, continuous design improvements, supplier changes, life cycle changes, corporate mandate and government legislation.

A Primary Task Root Definition and CATWOE for Market Requests.

Root Definition

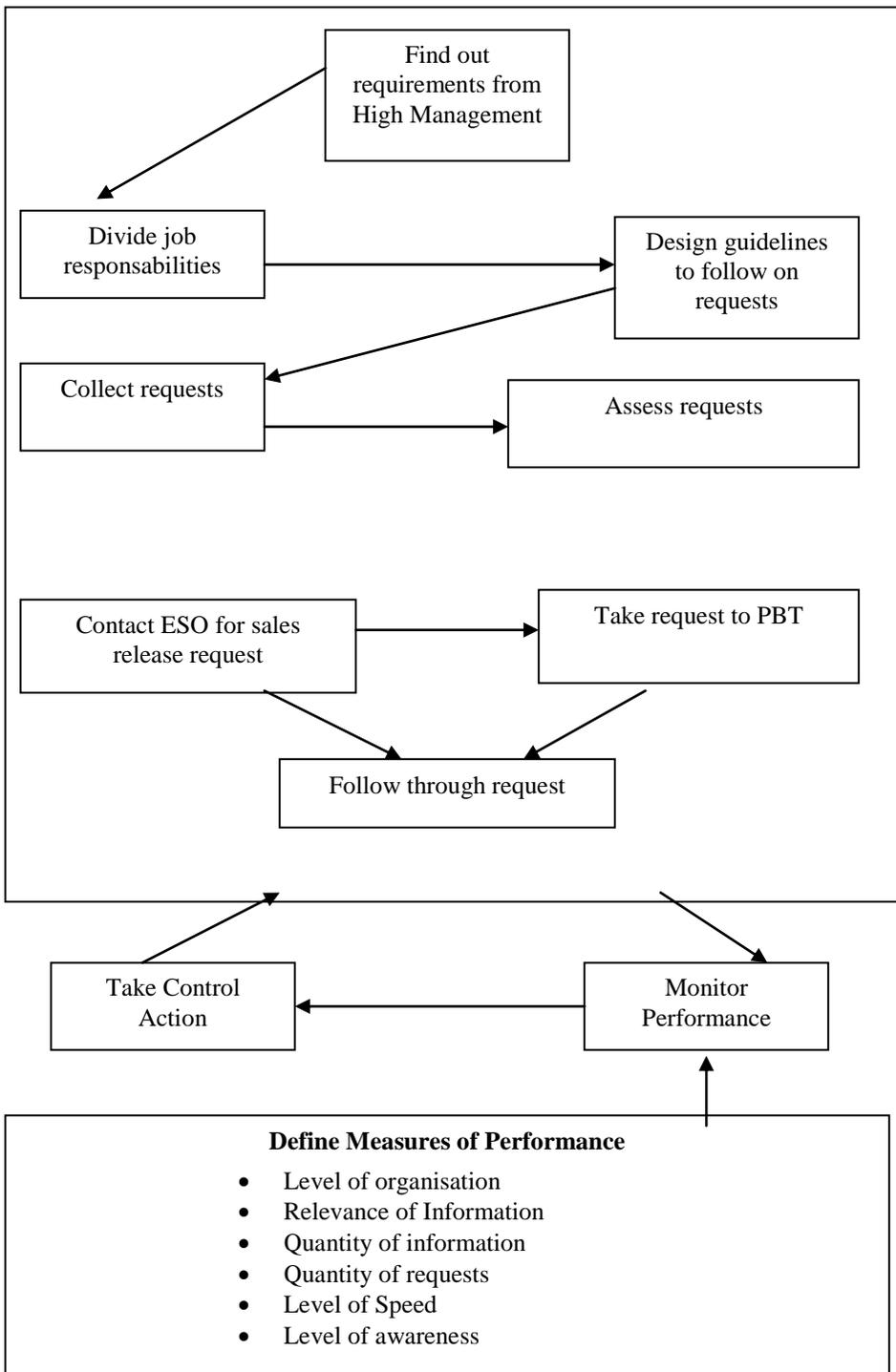
Market Requests is a system in which the Strategists, Marketing Line Managers, National Sales Companies, European Sales Operations and Platform Business team transform Market Requests into product change for the needs of the company as a whole. The Strategists and Marketing Line Managers, NSCs, ESO and PBT are responsible to high management. The assumption is made that this co-ordination of Market Requests improves organizational procedures and profit margins. All this is done under the wider constraints of technology, resources and raw materials, legalities and socio-and cultural demographics.

C -Company as a whole; **A**- Strategists, Marketing Line Managers ,NSCs, ESO, PBT; **T**-Market Requests into product changes; **W**-Co-ordination of Market Requests improves organizational procedures and profit margins ; **O**- High Management; **E** -Technology, resources and raw materials, legalities, socio-and cultural demographics



Sursa: ***, EBT:The Marketing Plan, Russelsheim, 2010;

Fig.no.1. A Conceptual Model of the Marketing Plan as a system to produce a structured Marketing Strategy in the shape of a Marketing Plan



Source: Own research and preelucration

Fig.no.2. A Conceptual Model of Market requests as a system to produce changes An Issue-based Root Definition and CATWOE of Market Requests from NSCs

3.Conclusions

The company Adam Opel AG is extremely large and employs about 53,000 people. Within the company there are several major departments, such as marketing, personnel, distribution, technical design and production. All these departments have their own individual cultures, however in general they share a common “role” culture and a similar hierarchical structure. There are strict procedures, that need to be followed for every small task, such as ordering a new PC to moving a car from one department to another. The great differentiation to the company’s role culture lies in its information management. Due to the introduction of modern technology, such as telephones and Lotus Notes, the company allows unstructured and uncontrolled departmental interaction. For example, it is possible to get in contact with any department just as long as there is knowledge of a contact person.

The organization of company information is chaotic, as there is no centralised system where information is stored.

The EBT is a fairly new entity, with an organizational structure based on the idea of Japanese-type group culture. This type of culture has proved successful from a departmental point of view. However, Opel has a totally different culture. This culture is based on a system of hierarchy. In other words, one is horizontally structured (EBT), while the other (rest of Opel) is vertically structured. The EBT’s structure monitoring of performance, work patterns and even language is different to the rest of Adam Opel. In some cases, this makes acquisition of information and communication in general a problem.

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SUB-SECTION: BUSINESS ADMINISTRATION

THE TOURISM BARRIERS OF THE DISABLED IN ROMANIA

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This article seeks to address a very sensitive issue in Romania, the disabled tourism. The natural question is whether tourism can respond and meet the needs of such people. Internationally, the researches in detail about tourism for people with disabilities are limited in this direction, and those who exist are focused more on lack of physical access to certain services in the hotel units. As for the problems (barriers) that a person with disabilities may face when seeking to participate in the act of travel there were found numerous internal and external barriers in trying to participate in tourism activities

The study seeks to identify how normal people behave towards people with disabilities and aims to demonstrate the existence of correlations between the responses of the interviewees, which would lead to the presentation as close to the truth as possible of the results from the sample (section), transposed over the population from which the sample belongs and also lead to finding conclusions on which there could be made several proposals.

Keywords: tourism, disability, social tourism, attitude, internal and external barriers

Cod JEL: M10, L83

1.INTRODUCTION

Tourism in its current form appeared only in the XIXth century. Actions related to social tourism began in 1936, when the **International Labour Organization (ILO)** agreed that the on access to paid leave should be done by tourism (Convention No.52.). In essence, this agreement has also been mentioned in the **Universal Declaration of Human Rights** in 1948, stating that “everyone has the right to rest and leisure, including reasonable limitation of working hours and periodic holidays with pay”.

Thus we can say that tourism has emerged as a social practice due to the ethical demands of the representatives of employees, justifying the legitimacy of a specific right, so thus the right to travel, as an extension of the right to work, to rest and to take paid leave.

However, some social historians say that tourism has emerged a few decades earlier, with the opening of camps for disadvantaged children, as well as the opening of the twentieth century, youth hostels. The emergence of hostels and bed & breakfast accommodation system occurred in the late nineteenth century. At that time, most tourist facilities were the ones in the private sector or belonging to other organizations willing to improve tourist access to a much larger number of people and making a profit.

After the Second World War ended some social policies were implemented in several countries as subsidies for private housing, their renovation, modernization of equipment and infrastructure, and as well as aid to the population. Also, many associations have been created under different unions, travelling families , work councils, etc. all had as main objectives social development and expanding social tourism.

2. DISABLED TOURISM

This article seeks to address a very sensitive issue in Romania, the disabled tourism. According to the 448 / 6 December 2006 law , people with disabilities are those people who, because of physical illness, mental or sensory impairments, lack skills that prevent them from carrying out normal daily activities, requiring protective measures in support of recovery and social inclusion. The natural question is whether tourism can respond and meet the needs of such people. Internationally, the researches in detail about tourism for people with disabilities are limited in this direction, and those who exist are focused more on lack of physical access to certain services in the hotel units.

Very few studies have been published concerning the issue of tourism and people with disabilities (Burnett & Baker, 2001, Darcy, 1998, 2002). Some academics specialized on tourism were concerned with these problems in the late 1980s and early 1990s (Smith, 1987; Muloin, 1992), Smith's work being one of the few works published in a major tourism publication. Since then, academics in the field of tourism have been silent on this subject. Also referring to the disabilities literature which is characterized by the lack of consideration of those issues, identify one or two studies. Various studies are as well illustrated by the Canadian Tourism Commission (1997), Burnett and Baker's work (2001) in the U.S..

The broad spectrum of disability problem has become a field of study since the early 50s. Typically, these studies and debates related to persons with disabilities, in orbit around the **social model of disability**, emerged in Britain in 1976 from the activity against segregation by the Physically Unfit Union .

Disability is a generic term for diseases or disabilities, activity limitations and participation restrictions as defined in the international classification of functioning, and health disability adopted and approved by the World Health Organization to show the negative aspect of individual context interaction (Law 448 / 6 December. 2006, Art. 5, pct.16).

Researchers Hugh and Paterson (1997) say that the company creates an environment that does not take into account the needs of those with disabilities. They tried to make a clear distinction between those with impaired and those with disabilities. Such **disorders** refer to the normal functioning of the individual caused by mental or sensory dysfunctions and **disability** is the loss or limitation of opportunities to live normally in society on an equal level with others due to physical barriers. The fact is however that until nowadays a social model for people with disabilities wasn't treated in tourism literature.

3. OBSTACLES IN ACCESS OF THE PEOPLE WITH DISABILITIES

As for the problems (barriers) that a person with disabilities may face when seeking to participate in the act of travel there were found numerous **internal and external barriers** in trying to participate in tourism activities . These barriers can be classified as:

Internal barriers are obstacles that must be overcome before a person becomes active in terms of tourism and that the individual has the greatest control over these barriers. In this way people with disabilities should be helped through institutionalization at the recovery units. For example in Romania this aid is extremely small as about 3.62% of people benefit from institutionalization

External barriers - which may inhibit their journey, they may limit the options or reduce satisfaction. This category includes: *architectural barriers* such as stairs, toilet accessibility, accommodation, and *environmental barriers* difficult paths, tree roots or other obstructions outside, *means of transport*, especially the local variety of means of transport, which includes cars, buses and taxis ; *laws and regulations* that prohibit the people with disabilities to bring necessary equipment with them, *communication difficulties* both at home and at the receiving person, *negative attitudes* from service providers and *incorrect information*. Tourists with a disability must consider that foreign travel agencies must break down these barriers.

In 2002, Darcy reveals that **attitudes towards individuals with disabilities**, and research undertaken on this market segment, in particular, have evolved significantly in the last 25 years. Originally attitudes, regarding disability were conceptualized in a framework of personal tragedy, concentrated on individual helplessness. The person was treated as an unfortunate victim. Since then, the emergence of political movements for the rights of persons with disabilities have changed the overall impression of personal tragedy, to disability as a form of social oppression. The way in which disability is conceptualized and natural attitudes have a profound effect on society and people with disabilities. First of all, attitude influences individual behavior regarding people with disabilities. Understanding disability as an " abnormality" of a person rather than a social failure, it outlines behaviors that lead to isolation and marginalization. In many cases, certain behaviors are not intentional but rather are rooted in social practices "non-disabled". Second, attitudes form public opinions, attitudes which influence social and public policies, resource allocation and access to education, transportation, jobs, etc.. Finally, prevailing attitudes influence the perception of people with disabilities of themselves .

4. RESEARCH DIRECTIONS

The study seeks to identify how normal people behave towards people with disabilities and aims to demonstrate the existence of correlations between the responses of the interviewees, which would lead to the presentation as close to the truth as possible of the results from the sample (section), transposed over the population from which the sample belongs and also lead to finding conclusions on which there could be made several proposals.

Between the specific objectives we find: knowledge or the social prerequisites, psychological and cultural of the interviewees; discovering the causes that lead to negative feelings, on people with disabilities, eliminate the causes, proposed ways of intervention and trying to change the behavior of the normal people.

Knowing the psychological assumptions helps determine the way people act, understand the personal points view and also allows the identification of certain measures by which those with disabilities could be integrated and accepted in society.

Discovering the causes which lead in forming an opinion regarding people with disabilities could be one of the most important secondary objective, this objective is important because it may act directly on the cause and not on the effect that results.

Finally the directions of intervention in modifying behavior of the normal people towards people with disabilities should be materialized at the end of the present study. The modeling of the behavior occurs when the stimuli are identified, the basic behavioral processes are analyzed, the explanatory variables of behavior and behavioral response.

5. RESULTS INTERPRETATION

The research was conducted on the basis of a questionnaire. Sample size was 100 people chosen randomly. The sample was structured: 40% of them are under 24 years, 20% of people are between 25-30 years old, 8% of people between 31-35 years old , 14% between 36-45 years and the rest, 18% are people over 45 years. Of these 62% were women and 38% were male. Regarding the marital status of respondents 44% aren't married, 34% are married and the rest belong to other categories (divorced, widowed or living with partner).

The study was conducted by distributing questionnaires in urban areas, in Timisoara, and 62% of the respondents have completed either a college, a university or a post-graduate study, while 32% are high school graduates. We can say that the education level has a major influence in assessing the behavior of people with disabilities, in the knowledge that education is directly proportional to the positive responses in terms of acceptance, understanding and helping these people with disabilities. This can be observed from the study because the question of concerning "helping

people with disabilities", 94% of the respondents would be willing to help such a person and 72% of them, have done it already.

Regarding the attitudes of normal people towards people with disabilities in society, it is found that the opinions of those people are divided. On a scale containing five possible answers: from compassion, mercy, acceptance, restraint, and indifference it is found that compared to the normal version of acceptance chosen by 34% of respondents, there is a balance between compassion and restraint (16% of the responses for each question) and an imbalance between compassion and indifference, they have chosen 32% and 2% of respondents (an insignificant percentage). Because according to the glossary "compassion" is associated with a sense of understanding and sympathy to the suffering and misery concerning someone; positive feelings total overall 82% of responses, a sign that these people are understood and are given support from individuals.

Regarding the people's situation in Romania, it is not a very good one because the perception to the human rights of persons with disabilities knows negative aspects. To analyze the situation of peoples with disabilities in Romania there were developed three questions:

1. *"Do you think that there are respected the human rights of people with disabilities in Romania?": 68% consider that the right are not respected, 22% said yes and 10% of them do not know or are not interested.*
2. *"Do you consider that people with disabilities should receive certain gratuities?": 84%, have replied yes and 16% said that they do not.*
3. *"Should programs against discrimination of the disabled, be introduced in schools?": 62% said yes, 16% said no and 22% believe that these things must be learned at home.*

In conclusion, the Romanian society does not help people with disabilities in Romania and the fundamental rights are not respected. In principle these people would be helped by the state through the granting of gratuities and benefits. What is crucial is that programs against discrimination of the disabled should be introduced in schools, because it is known that the children's education must contain rules that causes them to act ethically and morally towards these people.

When asked "What do you think the integration of disabled people in society", the answers "very important" and "Important" occupy the largest share of responses 54% and 28%. We can say that 82% of the respondents believes that integration of persons with disabilities in society is extremely important and agree with this point of view, and consider that such people should not be marginalized.

Also on the problem in terms of employment chances of people with disabilities. In this sense 78% of people with normal capacity to work, inform that employers are reluctant in hiring these people. 80% of those surveyed said they have colleagues at work with disabilities and that there are no cooperation or social issues, but there exists a significant number of people who would not agree to collaborate at work with them, which is concerning because 14% of them answered like this

Regarding the participation of disabled people to the act of tourism, individuals answers were hopeful because even if, as the disabled are not accepted at work, the situation is different in a hotel, 92% of respondents would not be disturbed by the presence of people with disabilities in a hotel where they were individually penned.

When asked "What do you think about tourism products for people with disabilities?" being an open question, respondents were able to freely choose their answers without being restricted by answers.

The answers to the questions above are different and presented in a special way by each interviewee. The most frequent response was *"I have not heard about such products for people with disabilities"* Those who have heard and know these products are of the opinion that the number of products is very small compared to the number of people with disabilities, and that

these products are not known even by the recipients, and are difficult to obtain even if you belong in that category disabled. The most important thing about these products is that it gives people with disabilities the opportunity to socialize and integrate into the society.

Another view of respondents: state organizations, regional and local ones do not offer aid to the disabled.

Regarding the promotion of these products, media channels do not consider this as an important fact and do not promote them because they do not obtain financial benefits. Existing channels that promote such products are local ones but of no national importance.

Other opinions say that those people with disabilities should receive such products irrespective of destination, travel time or means of transport chosen, thus a social development of tourism and also building access roads and other facilities absolutely necessary for each hotel, motel, resort, tourist destination.

6. CONCLUSIONS AND PROPOSALS

Surrounded by negative attitudes, people with disabilities can internalize negative beliefs and attitudes. It is recognized that the nature and severity of disability can affect the scope of activities to which a person can participate, but may also influence how the tourist experience is formed.

After analyzing the data we can say that people with disabilities are accepted in society by all other categories of people by supporting the integration process, respondents have the opinion that this process is of great importance and that it should exist in any modern society; besides the fact that the states must be required to provide the disabled and give certain financial gratuities and psychosocial help.

Most people have the opinion that people with disabilities and people with disabilities face difficulties in finding jobs, qualified or unqualified. Their problems are accentuated and supported by the reluctance of employers, higher health costs and other types of insurances. In addition to these serious problems, these people are refused at interviews because of their condition. Although 86% of respondents would not be "bothered" to work with people with disabilities that is not reflected in obtaining a job, from the individuals concerned.

Granting help to such a person is a fairly widespread phenomenon in Romania, as reflected by the number of responses, which shows a great solidarity among people belonging to all social categories and more than 10% of respondents have in their families people with disabilities and face with all the problems that such a person may have.

The most important person's perspective refers to introducing these special programs against discrimination for people with disabilities in schools. These programs lead to changes in behavior and attitudes towards people with disabilities and disabled. Through these programs there are removed barriers of communication, the emphasis is on socialization and integration, on giving unconditional aid and late but not least social acceptance of each people.

The attitude of respondents should be improved and may even reach some collaborations, events, games and excursions for all people (including people with disabilities). These events have a crucial role in changing the negative aspects and strengthen the already existing ones.

Facilities for disabled people, should be necessarily placed in any institution, means of transportation, hotels, resort, and other accommodations and tourist destinations, etc. These facilities could be regulated by laws, governmental decisions and a supervision is required.

Tourism products for people with disabilities should be promoted on the channels known by the public, the number of products should cover as much of the total number of recipients. This can be done by organizing cyclical products or circuit ones so that in the course of two years all disabled people would enjoy a product of this kind.

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START-UP FINANCING SOURCES: DOES GENDER MATTER? SOME EVIDENCE FOR EU AND ROMANIA

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Although financial resources are very important in SMEs in general, and for start-ups in particular, many entrepreneurs face numerous restrictions in finding sources for start-up financing. The present article aims to investigate the similarities or differences in start-up financing sources due to gender issues, otherwise to investigate if female entrepreneurs use (or have access) different financial sources in the early stage of their business.

As reported by the literature, access to finance is one of the most important issues for SMEs and nascent entrepreneurs. Moreover, among the main financial issues, the first one is the access to start-up finance (Schwartz, 1976; Carter and Cannon, 1992; Johnson and Storey, 1993; Koper, 1993; Van Auken et al, 1993; Carter and Rosa, 1998, FOBS survey 2005). In all sectors, women use for starting up businesses substantially less capital than men. Women encounter, more than men, credibility problems when dealing with bankers. This problem causes important effects concerning the performance, survival and growth of women-run businesses.

The present research focuses on revealing how male and female entrepreneurs face and solve the problem of start-up financing sources. The methodology is based on using the dataset "Enterprises managed by the founder - broken down by gender of the entrepreneur", available in EUROSTAT database. The data selected refers to the start-up financing sources available for European Union and Romania, regarding activities included in NACE: Industry and services excluding public administration and management activities of holding companies and 2005 as time of reference. The data were used to make some comparison between: male versus female entrepreneurs in EU; male versus female entrepreneurs in Romania; EU entrepreneurs versus Romanian entrepreneurs.

The main findings reveal that there are no significant differences between men and women concerning the start-up financing sources. The main sources are the internal ones: own fund and savings (ranging from 82% to 92%), and financial assistance from family and friend (ranging from 25% to 34%), both for male and female entrepreneurs, both for EU as an aggregate and Romania. Among the external sources, bank loans are the most important: they have been indicated by 17% of the females (EU) and 19% of the males, about 10 times more than the other external sources together: capital contributions from other enterprises and venture capital. There are no significant gender differences in EU case, and also there are not in the case of Romania. Apparently, gender does not matter about sources used for start-up financing. The most significant difference concerns the financial support from public authorities as financial source. The number of female entrepreneurs indicating financial support from public authorities as a source for start-up financing represents 6.18% in EU, versus 0.17% in Romania (36 times less in Romania than the EU average), while for men the figures are 4.85% in EU versus 0.30% in Romania (16 times less in Romania). This gap brings again in front of policy responsible the imperative of financially supporting nascent entrepreneurs, as the key to sustainable economic growth.

Key words: entrepreneurship, women entrepreneurship, financial sources for business start-up

JEL code: M13

Introduction

Entrepreneurship is widely considered as a driving force of economic growth, job creation and promoting innovations, and thus, an important focus of economic policies. As a result, the number and incidence of SMEs in the national economies are increasing constantly. Nevertheless, fostering entrepreneurship needs providing fair access to financing. Unfortunately, the access to finance is mentioned as one of the most important barriers (Hughes and Storey, 1994) and in the case of female entrepreneurs, the situation is even worse.

In this paper we are going to investigate the differences (if there are any) between female entrepreneurs and male entrepreneurs with respect to the sources of start-up financing, for EU and Romanian case. The paper is organised as follows: in the first part, we make a brief review of the literature; in the second part we present the methodology used, in the third part we emphasize the main results, and finally we conclude.

1.A brief review of the literature

Start up financing is a major problem for the nascent entrepreneurs, as banks, the most important lending supplier, are reluctant to involve in SMEs financing, for reason related to asymmetrical information - adverse selection and moral hazard. The financial problem is a constant of the entire life-cycle of the SME, but researches showed that the first stage of existence (from idea to start up and then, first steps to development) is more affected by financial restriction than following stages. Especially in the so-called "valley of death" stage, the problems are very serious and most starting entrepreneurs use their own savings, family and business angels support (see Badulescu and Badulescu 2010).

Theoretical explanations of the prevalence of the internal finance (personal savings or retained earnings) in the SMEs case are confirmed by recent European Barometer on Entrepreneurship (EC, 2009). According to this, across all EU Member States, a majority of interviewees agreed that it was difficult to start one's own business due to a lack of available financial support. In Greece, Bulgaria, Latvia, Slovakia, Spain and Romania, 90% or more of the respondents agreed (strongly agreed and agreed) with that statement. At the bottom of the ranking, people in Finland, Austria and the Netherlands agreed with the statement on a proportion of less than two-thirds (56%-63%).

Female entrepreneurs, more than males, face start-up financial difficulties. Start up finance is one of the most cited problems in the case of women entrepreneurs. For example, the most important problems facing women entrepreneurs are – in the opinion of the specialist agencies cited by CEEDR 2000 – as follows:

- Start up finance (indicated by more than 25% as a major problem);
- Finance for growth (indicated by more than 20% as a major problem);
- Discrimination by finance providers (indicated by more than 15% as a major problem). All of these are related to the access to finance.

Among the *four* areas of finance identified as posing problems for women by Carter, S. (2000) and then Carter, Anderson and Shaw (2001), the first one is access to start-up finance (Schwartz, 1976; Carter and Cannon, 1992; Johnson and Storey, 1993; Koper, 1993; Van Auken et al, 1993; Carter and Rosa, 1998, FOBS survey 2005). Irrespective of sector and location, *women start in business with only one-third the amount of capital used by men*. Women are more likely to encounter credibility problems when dealing with bankers. It is difficult to raise start-up finance. Some studies have shown links between low start-up capital and subsequent poor performance. Female entrepreneurs use substantially less capital at start-up than male owners, although intra-sectoral similarities demonstrate that gender was only one of a number of variables affecting the business financing process (Carter S. and Rosa P. 1998). The majority of women business owners have had to rely to a significant extent on self-generated finance during the start-up period of their business. Whilst many small businesses face difficulties in accessing the finance that they

need (particularly at start-up), organizations specialising in providing support for female entrepreneurs clearly feel that this is one area where their clients face greater difficulties than their male counterparts. Shaw, Carter and Brierton (2001) have found research that suggests women face more difficulty when seeking finance to set up and grow their business. They note that women use only one third of the starting capital that men do, irrespective of sector; on-going growth finance may be less available for female owned firms than it is for male enterprises, largely due to women's difficulty in penetrating informal financial networks. More women-owned businesses, for example, used family savings, household income, inheritance, grants and friends as sources of business finance. "In fact, Carter and Anderson (2001) found that women's personal savings constitute between 80% and 99% of initial capitalisation, compared to men where the figure is between 30% and 59%. Although this may seem admirable it can often have a negative effect on the business (Sannikova 2007).

Using a panel of 2000 Dutch start-ups (1994), Verheul and Thurik (2001, p. 14) found out that „female entrepreneurs have a smaller amount of start-up capital than their male counterparts, but that they do not significantly differ with respect to the composition of financial capital". Women start up their business with less capital than men, and this can be attributed to a direct effect („gender effect": men and women having the same characteristics but different with respect to the way of financing their businesses) and to an indirect effect („the female profile": differences related to business type, management and experience)(Verheul and Thurik, 2001). Smaller financial resources to start up business leads unfortunately to less business performance and growth (Welter et al. 2006).

2.Methodology

Aiming to reveal the similarities or differences between female and male entrepreneurs' start-up financing sources, in EU and Romania, we used the dataset "Enterprises managed by the founder - broken down by gender of the entrepreneur", available in Eurostat database. We select from this database the data regarding the start-up financing source available for European Union (aggregate changing according to countries available) and Romania. Available data refers to NACE: Industry and services excluding public administration and management activities of holding companies and to the year 2005.

First, we select the data for the EU, broken by the gender of the founder and manager of the firm and search to arrange the sources for start-up financing starting with the most important, e.g. more nominated by the respondents. Second, we did the same thing for the data available for Romania, sorting them by relevance. Third, we tried to make some comparison between:

- Male versus female entrepreneurs in EU
- Male versus female entrepreneurs in Romania
- EU entrepreneurs versus Romanian entrepreneurs.

3.Discussion and results

As the literature reported, and according to expectations, the main source for start-up financing used by women nascent entrepreneurs in EU are the own funds and savings. More than 4 out of 5 cited own funds and savings as a source for start-up financing, followed by the financial assistance from family and friends, reported by 3 out of ten women entrepreneurs. Far from these internal sources, the external sources are barely mentioned. Even we approach bank loans together - with and without collateral – they are mentioned by only 1 out of 6 of the respondents. If we approach separately bank loans without and with collateral, the third source appears to be The financial support from public authorities (mentioned by 6% of the respondents). Capital contributions from other enterprises and venture capital are nominated by only 1.34% of the women entrepreneurs. The complete picture is shown below:

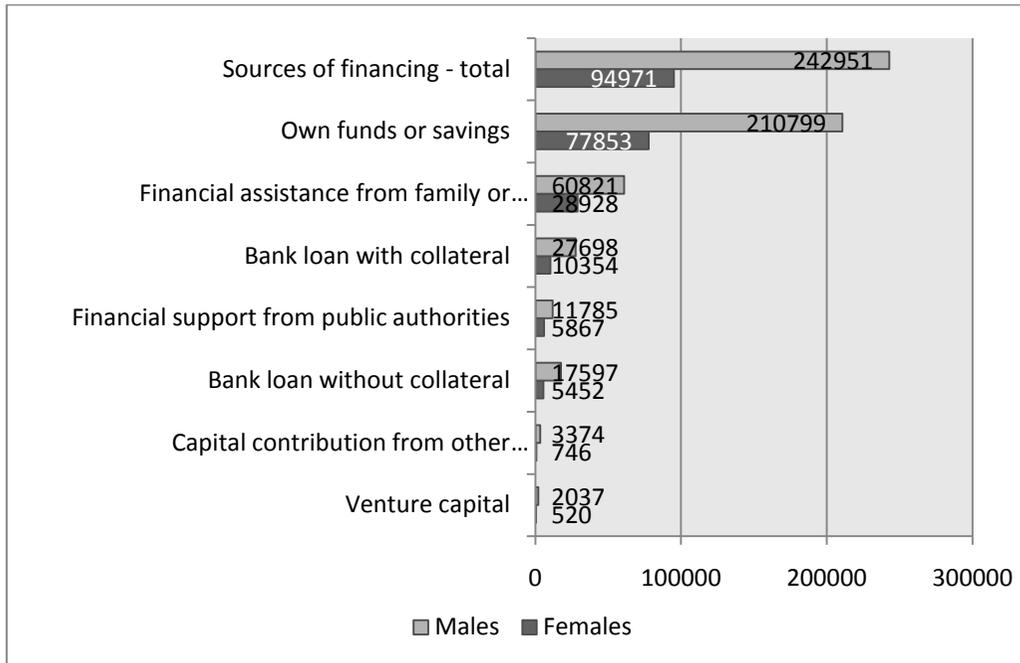


Chart 1. Sources for start-up financing, NACE industry and services, EU, males and females, 2005

Source: based on Eurostat database

Basically, the same ranking applies for men entrepreneurs. Own fund and savings, and financial assistance from family and friends are the first two sources for start-up financing. Own funds and savings are mentioned by 87% of the men (even more than the 82% in the case of women), while financial assistance from family and friends is mentioned by 25% of the men (less than the 30% indicated by women). This little difference can be attributed to the fact that men may have (or may consider that!) more personal money than women, so essentially the same money are, for men, own fund, and for women, family's money. It may be also an indication of the less effective networking in the case of women (explaining why financial assistance from friend is less important than in men's case. And also, do not forget that women have more women friends (with less financial resources) and men have more men friends. Bank loans with collateral are the third financing source. Together, bank loans (without and with collateral) are indicated by 18.64% of men (versus 16.64% of women). Financial support from public authorities (mentioned by 4.85%) and capital contributions from other enterprises and venture capital (mentioned by 2.23% of the respondents) are still marginal sources.

In the case of Romanian entrepreneurs, the picture is mainly similar, as expected. The main source is, far from the others, own funds or savings, indicated as financing sources by 90% of the female entrepreneurs and even more by male entrepreneurs. The second source is financial assistance from family and friends (indicated by 1 out of 3 entrepreneurs, males and females). Bank loans are indicated by 7% of the Romanian female entrepreneurs, and 9.24% of the Romanian male entrepreneurs (for comparison, bank loans have been indicated by 17-19% in EU case). Capital contribution from other enterprises and venture capital are almost not used as start-up financial sources. Financial support from public authorities is effectively non-existent, with 0.17% of the females and 0.30% of the male entrepreneurs indicating as a start-up financial source.

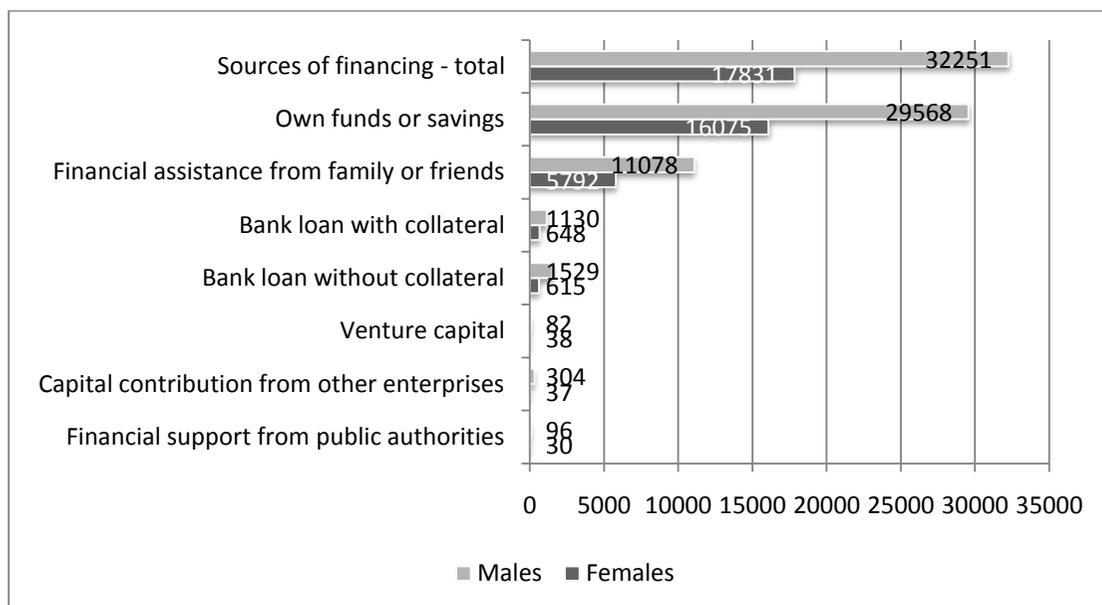


Chart 2. Sources for start-up financing, NACE industry and services, Romania, males and females, 2005

Source: based on Eurostat database

4. Conclusions and further implications

Main sources for start-up financing remain internal sources: own fund and savings, and financial assistance from family and friend, both for male and female entrepreneurs, both for EU as an aggregate and Romania, a new member state and still developing economy. Regarding the external sources, bank loans are the most important: they have been indicated by 17% of the females (EU) and 19% of the males, about 10 times more than the other external sources together: capital contributions from other enterprises and venture capital. There are no significant gender differences in EU case, and also there are not in the case of Romania. Apparently, gender does not matter about sources used for start-up financing. The access to external financial sources is restricted for entrepreneurs of both genders: only 1 of 6 nascent entrepreneurs has access to them. The complete picture and comparison are shown in Table 1.

Table 1. Sources for start-up financing: males versus females, Romania versus EU (2005)

Source for start-up financing	Indicated by ... % of the females (EU)	Indicated by ... % of the females (RO)	Indicated by ... % of the males (EU)	Indicated by ... % of the males (RO)
Own funds or savings	81.98	90.15	86.77	91.68
Financial assistance from family or friends	30.46	32.48	25.03	34.35
Bank loan without collateral	5.74	3.45	7.24	4.74
Bank loan with collateral	10.9	3.63	11.4	3.50
Capital contribution from other enterprises	0.79	0.21	1.39	0.94
Venture capital	0.55	0.21	0.84	0.25

Source for start-up financing	Indicated		Indicated		Indicated		Indicate	
	by ... % of the females (EU)	by ... % of the females (RO)	by ... % of the males (EU)	by ... % of the males (RO)	by ... % of the males (EU)	by ... % of the males (RO)	by ... % of the males (EU)	by ... % of the males (RO)
Financial support from public authorities	6.18	0.17	4.85	0.30	4.85	0.30	4.85	0.30

More than gender seems to matter the development stage and/or public involvement in policies and programmes fostering entrepreneurship. The most significant difference revealed by the data is related to the financial support from public authorities. The number of female entrepreneurs indicating financial support from public authorities as a source for start-up financing represents 6.18% in EU, versus 0.17% in Romania (36 times less in Romania than the EU average), while for men the figures are 4.85% in EU versus 0.30% in Romania (16 times less in Romania). Probably the gap is even bigger now, after implementing numerous European programmes in fostering women entrepreneurship.

After all, if gender does not matter, there other things that matters: entrepreneurship policies! Some further research can be carried out regarding other things that matter: economic sector can be one, so different NACE in the EU database are to be studied further. And further policies should be enforced to promote, foster and support (financially included!) entrepreneurship, as an important key to economic growing and social progress.

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COLLATERAL'S IMPORTANCE IN SMES FINANCING: WHAT IS THE BANKS' RESPONSE? SOME EVIDENCE FOR ROMANIA

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Searching for funding, SMEs' managers face various obstacles arising from information asymmetry, lack of experience, severe market conditions, and insufficient or unsatisfactory collaterals for banks (OECD 2006; Bădulescu and Bădulescu 2010; OECD 2000 and 2004; Lin and Sun 2006; Toivanen and Cressy, 2000). The collateral issue is extensively discussed in literature – preventing moral hazard, the alignment the interests (Stiglitz and Weiss 1981:393-410; Chan and Thakor 1987:345-363; Jiménez and Saurina 2004), a means to discipline the borrowers behaviour (ex post) given the existence of a credible threat (Aghion and Bolton 1992:473-494), or even banking behaviour on the market (Manove et al. 2001:726-744, Argentiero 2009). In the same time we find that the perception of firms, revealed by National Bank of Romania (NBR 2010) survey data, show that banks still use the collateral as a measure of pressure, in special in crisis times. For an important part of managers, the bank increased the level of required collateral for existing, renewing or new credits, asking for new covenants, revealing a paradox of crisis time: while the bank loans remained the favourite method of external financing needs of business, the banks often reduce their availability. Although the bank loan remains the favorite mean to support the growth ambitions, the higher level of collateral or lending costs are seen as principal obstacles by the majority of manager in EU. According to NBR survey, the influence of risk factors related to collateral had a climax at the end of 2008 and 2009, when the banks have tightened the requirement for loan guarantee. Using National Bank of Romania (NBR 2010) survey data, we show that the banks still use the collateral as a measure of pressure, in special in crisis times. For an important part of managers, the bank increased the level of required collateral for existing, renewing or new credits, asking for new covenants, revealing a paradox of crisis time: while the bank loans remained the favorite method of external financing needs of business, the banks often reduce their availability. According to NBR survey, the influence of risk factors related to collateral had a boom at the end of 2008 and 2009, when the banks have tightened the requirement for loan guarantee. Following the European trend in straightening the credit conditions, Romanian market had a more pregnant evolution with a rapid deterioration of these conditions during the second and the third quarter of 2008. In general terms, the seeking for higher percentage of coverage with real estate collaterals, paradoxically, makes banks more vulnerable, given their pro-cyclical behaviour, feeding the real estate market crisis.

Key words: SMEs lending, collateral, credit standards

JEL code: G21

Introduction

This paper aims to emphasize the importance of collateral in credit risk management, how collateral influences market behaviour of banks and customers selection, but also the excessive focus on collateral coverage during crises times. In the first part, we will review the main theoretical approaches regarding the collateral and its importance for the credit risk management. In the second part we will emphasize the importance that SMEs give to the relationship with

financing institutions, and the expectations and obstacles in credit use as important mean for growth. We will detail Romanian experience starting from NBR surveys, and we show that banks' response to crisis in 2009-2010 was to restrain lending, to tighten credit requirements (collateral, costs and covenants) and to enhance caution to real estate market. Finally, we conclude on the banks' behaviour and responses and on the consequences of this attitude on the economy.

1. Overview on the banks' policy regarding collaterals required from SMEs

Focusing on value creation and based on accepted and controlled risks (OECD 2006; Pathrose 2005), banks are often reluctant to grant loans to SMEs. This fact is due to some reasons, such as:

- informational asymmetry, resulting from the lack of standardized financial information and statements provided by SMEs, adding the bank's limited knowledge about the company seeking a loan (Badulescu and Badulescu 2010);
- higher risks associated with SMEs lending, due to limited assets that can be used as collateral, low capitalization and vulnerability to market risks;
- besides the fact that small enterprise cannot provide adequate collaterals, they hardly convince the banks about their managerial and marketing abilities or technical skills, that are essential to generate adequate cash flows and a proper debt service.

On a first sight, the financing provided to SMEs – various, in small amounts and in a reduce typology compared to large companies – could involve lower cost of transactions; however, the situation is, in fact, different. The costs involved by the analysis of the application and disbursement of a loan are generally independent of the requested amount and usually comprises other fixed costs as legal taxes, costs to obtain risk information from specialized agency etc. (OECD 2006). In the case of small amounts, it is very difficult to recover a total cost, and the unique solution could be a strict control of them by standardizing the credit types, reducing the processing time etc. Implementing a scoring system can be a way to consistently reduce and uniform the transaction cost, but this step involves an important database for calibrating, major changes in borrower and lender mentality, and it shows real efficiency only for credit institutions with lots of loan application from SMEs.

Collateral impact on credit risk, and, in a macroeconomic perspective, on the supply of credit to the companies, in special for SMEs, is a topic attracting a constant and increasing concern in recent years. From the theoretical point of view, we find two alternative interpretations that lead, empirically, to different predictions. On the one hand, is the adverse selection problem faced by a bank in financing activity, and therefore, the security offered by debtors can help alleviate this problem (Stiglitz and Weiss 1981:393-410; Chan and Thakor 1987:345-363). Thus, low-risk borrowers are willing to offer a better guarantee, considering their lower risk as a signal for their capabilities fulfil its obligations under the credit agreement and, therefore, are less probability to lose the guarantee. The guarantee is interpreted as a signal that allows the bank to reduce or eliminate the adverse selection problem caused by the existence of informational asymmetries between the bank and borrower, when the loan was approved, (Jiménez and Saurina 2004).

On the other hand, is the opinion, that even there is a *ex ante* symmetry between debtor and creditor (for example, the bank knows the quality of the debtor and correctly predicts the role of loan), guarantees are designed to mitigate the moral hazard problem once the loan was granted. In this respect, the security engaged helps to align the interests of both, creditors and debtors, thereby avoiding a situation where the borrower makes less effort to ensure the success of the project for which funding was granted. Security becomes a means to discipline the borrowers' behaviour (*ex post*) given the existence of a credible threat (Aghion and Bolton 1992:473-494).

Starting from this view, we can expect to find a direct relationship between loan quality and/or the borrower, and the size of collateral, i.e. the assumption that the guarantee is a signal of high

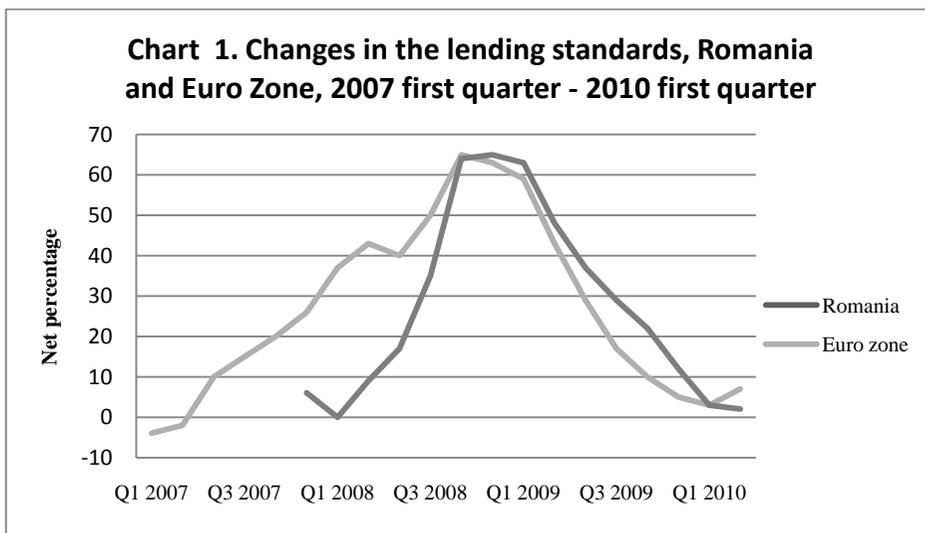
quality borrowers. However, this hypothesis is not agreed by the bankers, who tend to establish a direct relation between the level of credit risk and the volume of collateral.

2. Banks versus customers on SMEs financing. Evidence from Romania

For Romania, the analysis can be completed with another perspective, on the other part involved - the central and commercial banks, and we notice a pattern similar to the EU's one, but sometimes adapted to the specific conditions of the Romanian economy and its response to the crisis. According to the NBR quarterly survey on lending for non financial sector and population (NBR, 2010), lending standards have remained mainly unchanged over the first part of 2010. The degree of accumulated restrictiveness seems to be deemed sufficient in the current economic context, based on the fact that 2009 was characterized by a relatively continuous process of tightening of these standards (see note, NBR, February and August 2010).

According to these researches, the companies associated risks increased throughout the economy, particularly in the construction and real estate sectors and, as confirmed by above data at EU level, corporations have shown, for the first time in Romania last decade, a significant growth risks.

At the aggregate level, lending standards (internal lending norms guiding the credit policy of the credit institutions) were slightly tightened in the fourth quarter of 2009, but remained relatively unchanged in the first half of 2010. The recent developments and projections for the next period, shows that the degree of restrictiveness of credit standards seem to be sufficient in terms of risk aversion of banks in the current economic conditions. It notes, however, that neither the euro area cycle tightening of credit standards is not completed, the level of restrictiveness increased in the first quarter of 2010 (NBR, February and August 2010)



Sources: National Bank of Romania, Bank lending survey, February and August 2010, <http://bnr.ro/Studies-3215.aspx> și European Central Bank, The Euro Area Bank Lending Survey - April 2010, http://www.ecb.int/stats/pdf/blssurvey_201004.pdf?0bd480f0b472e26541e56c7c1a5f4dff

In structure, slight tightening of lending standards of banks in Romania doesn't concern the company size (SMEs. Vs. Corporations), but rather the criterion of maturity. However, the perception of risk to SMEs remains higher than corporate, explaining the reduce availability of bank loans for SMEs. Among the main factors which led banks to change lending standards (as the economic prospective, the risk associated with the industries) were the increasing share of nonperforming loans in the portfolio, the risk of required collateral / security (see Table 1).

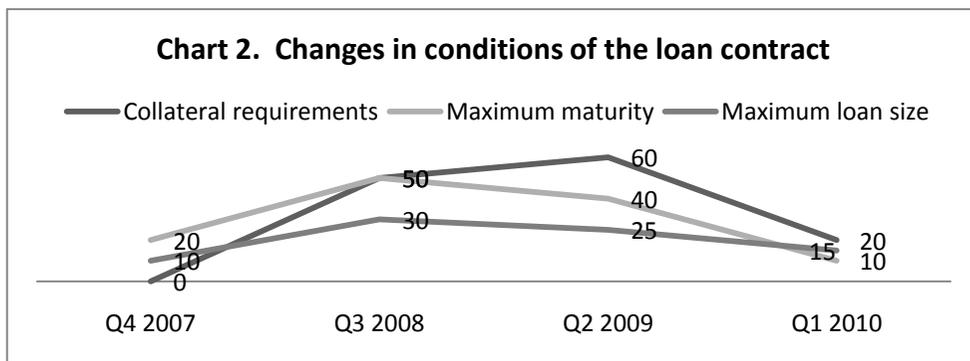
Table 1. The influence of risk factors related to collateral, by type of companies (net percentage)

Companies (loans)-period	Companies Total (%)	Large companies		SMEs	
		Short term loans (%)	Long term loans (%)	Short term loans (%)	Long term loans (%)
Q4 2007	20	50	60	40	40
Q3 2008	40	90	90	50	70
Q2 2009	80	60	50	60	60
Q1 2010	20	30	30	10	10

Source: National Bank of Romania, Bank lending survey, February and August 2010, <http://bnr.ro/Studies-3215.aspx>

Regarding the changes in lending terms and conditions (the specific obligations agreed between creditor and debtor in the credit agreement signed, i.e. interest rate, collateral, maturity, etc.), we notice a clear tightening in the second quarter of 2010, at the same pace as in previous quarters. Terms under review were mostly those related to collateral, given that over 75% of non-financial credit is collateralized. Frequently, banks alternate between increasing the costs or decreasing the maximum available loan.

According to reporting banks, the LTV (loan to value ratio, i.e. maximum share of credit in the amount of real estate collateral) for loans on the balance at the middle of 2010, secured solely by mortgages, stands at 87%. In the case of new loans granted in first part of 2010, banks had a more cautious attitude, the same indicator was 76 percent (NBR, February and August 2010).



Source: National Bank of Romania, Bank lending survey, February and August 2010

Conclusions

As conclusion, we can notice that banks still try to avoid moral hazard in the relationship with borrowers – i.e. SMEs, as that moral hazard can increase in crisis period. Banks have only secondary interest in the informational asymmetry issue. We also have found that the tightening of non-price conditions (i.e. collateral) has been used as a recovery practice in order to cover the macroeconomic or specific sectors risks increasing the size of collateral, often unrelated to individual performance of the companies. Moreover, increased propensity for real estate collateral, accompanied now by more pessimistic assessment of market value (see LTV development, specified above) seems to indicate an emphasis on limited perspective, only seeking for extended credit risk coverage, but ignoring the emergence of a new risk, the risk of collateral. It seems that the link between the bank propensity for fixed collateral and cyclicity of

real estate market (see Kim, Y.-J., Lee, J.-W 1999, FDIC, 1998) is not yet seen by the banks as a valid threat. The supervisory authorities' efforts to mitigate this pro-cyclical behaviour haven't got the desired effect.

Note: 1. Interpretation and presentation of answers was based on the *net percentage*, given the difference between the share of banks that reported tightening standards, terms and conditions of lending, and the percentage of banks reported easing of these, a positive short term balance indicates that a larger proportion of banks have tightened lending standards (NBR , February and August 2010).

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THE BRAND EQUITY OF TOURISTIC DESTINATIONS – THE MEANING OF THE VALUE

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In today's global economy, each place competes with other places for economic benefits. Destination has become a product that has to be promoted and sold in the most advantageous terms. The work below is an analysis of "brand equity" concept for touristic destinations, as found in the specific literature. Destination brands differ from product brands, major distinction being given by their stability/ instability. Brands of products are stable; this constant is maintained by the use of quality standards. Even in case of services, situation can be controlled, as quality standards could be perpetuated by a franchise system. Destinations are not depending on a single person, who decides, but a variety of them, economic agents, businesses, institutions and local population that can create/print form and structure changes of the destination.

The concept de brand equity applied for touristic destinations, is something relatively recent. The dimensions of a brand for touristic destinations are: awareness, image, loyalty, quality and value. All these dimensions build the branding equity of a destination. There is interdependency, between quality, image, loyalty and value. In order to determine the perception in regards to the quality of tourism services in Romania, in 2010 a comprehensive study was done among the inhabitants of Oradea city. Through this study we have pursued several objectives: to assess the importance of service characteristics, performance evaluation of tourism services in Romania, tourism personnel evaluation, in terms of evaluation and performance, perception of the quality-price ratio for Romania, compared with other tourist destinations. We call on the exploratory study conducted, as the value of the dimension- destination of the brand equity is given by the price-quality ratio. Using an explorative study on the market of Oradea city, it was highlighted the connection between perception of touristic services, estimation price-quality (value) and the loyalty potential of the foreign clients in proportion with the Romanian tourists, consumers of the Romanian touristic products.

Keywords: brand equity, destination, tourism, survey, Oradea

Code JEL: M21, M31

1. Introduction in the „brand equity” of a destination:

In relatively recent works, branding was treated as an essential subject (Aaker 1996), (Aaker and Joachimsthaler 2000), (Kania 2001). Modern branding appeared in the XIXth century and includes legal instruments as: logos, campaigns, identity systems, personality and the links between them. In tourism, branding is understood as being "(...) a unique combination of product characteristics and added values, both functional and non-functional, which have taken on a relevant meaning which is inextricably linked to the brand, awarenesses of which might be conscious or intuitive.(Morgan 1998: 140)"

Destination branding is even more recent. Among the first books that were exclusively dedicated to this subject, we mention *Destination Branding* (Morgan, Pritchard and oger Pride:2002), and also the published works in special number of the Journal of Brand Management (Hall:2002),

(Harrison: 2002) and (Morgan, Pritchard and Piggott: 2002). When talking about touristic destinations, brand equity is still a vague concept. The theoretical delimitation of this subject is still subject of changes. Brand equity is the process of not only establishing the characteristic of a brand, but also establishing the value of that characteristic. It comes from the financial evaluation literature of the 1990s (Barwise 1993). Aaker and Joachimsthaler (Aaker and Joachimsthaler 2000), both had an important contribution to the theoretical substantiation of brand equity. They launched the idea that the value of a brand is given by the: awareness of the brand, perceived quality of the brand, brand associations and loyalty for the brand. Hankinson completed the theory of brand value, by adding the concept of *brand network*, where the destination brand has four functions: (1) as a communicator, when the brand “represents a mark of ownership, and a means of product differentiation manifested in legally protected names, logos, and trademarks”; (2) as a perceptible entity “which appeal to the consumer senses, reasons, and emotions; (3) “brands as value enhancers,” that leads to the concept of brand equity; and (4) “brands as relationships, where the brand is built with personality and establishes a form of relationship with the consumer. (Hankinson 2004: 110–111), (Blain, Stuard and Ritchie 2005: 329).

Using the brand is one of the primary forms of product differentiation. The question is to what extent branding as part of marketing strategy can be used to create brand equity for a touristic destination that is not yet known, virtually the same time seeking notoriety and differentiation. There are opinions that say that this is possible. (Room 1992:13–21)

For a consumer, brand evaluation is simple. Brand equity value is given by the difference in price between a generic product and an equivalent one that “has a name”. This reference to generic products is increasingly difficult, as almost all generic products do not exist anymore. In regards to the touristic destinations, the brand equity evaluation method requires changes, as the comparison “on the shelves of a store” is not possible. In case of tourism destinations, the indicators used for assessing brand equity is: the number of tourists who choose a destination, the volume of expenditure made in that destination and the length of stay.

2. The dimensions of tourism destination brand

The experiential factor marks a significant difference between products and destinations. A destination cannot be tried, seen before purchase and consumption, therefore the idea of having a guarantee is excluded. The touristic product of a destination product is experiential by nature and it differs for each customer because of the internalization of the experience.

Novelty is essential to differentiate destinations. Tourist trip requires differences between place of residence and destination, among other destinations and chosen destination. This is why, in many promotional messages, the novelty is found even in the title or slogan. (Pride 2007)

A destination must be different from many points of view to worth the time and the money, but the novelty cannot be simply declared, it must be demonstrated -”novelty cannot simply declared, it must brand equity earned” (Cai, Gartner and Munar 2009: 54)

Novelty given by the destination is recognized in the perception of the consumers - consumers must be aware of the differences between their residency and other destinations. The dimensions of “destination brand” are different than the product brand, although mainly follows the same steps. Theorists and practitioners support the idea that places are being branded the same as products and services are. Kotler extended the concept of brand from products to destinations.

Konecnik and Gartner (Konecnik and Gartner 2007: 400–421) have proposed four dimensions that can be applied to destinations: **awareness, loyalty, image and quality**. Tasci, Gartner and So (Tasci, Gartner and So 2007) have added another one, **the value**, which we consider to be appropriate.

Different consumer segments evaluate each of these dimensions in different and significant ways.

- **Awareness** is an essential dimension of the brand. It is the first step in building brand equity. A place can be known in a certain context before it can be considered a potential destination. Goodall (Goodall 1993) identified four levels of awareness of a place: knowledge, familiarity, top of mind and dominant. Dominant has here the meaning of the spotlight for various reasons, it is what is called a "hot spot" and may be positive or negative in nature.

- **The image** is the dimension that attracted the most attention of researchers, there are a considerable number of articles on this subject. Initially it was thought that the image can substitute for the other dimensions of the brand, but this opinion has remained isolated. The roots of the brand are reflected in the destination image studies initiated since the 1970s (Hunt 1975) Creating a brand does not mean branding, though it's the base of the brand-building. Building the image is one step closer to the brand, but what still lacks is the **brand identity**. (Cai 2002)

Loyalty is given by repeat visit or repeat purchase.

- **Quality** is a subjective term, but can be operationalized through a series of scales. As an independent dimension (and not subject to image), it has been studied by many researchers (Fick and Ritchie 1991); (Murphy, Pritchard and Smith 2000). Quality is assessed from consumer's perspective, in fact the quality perception is evaluated. Quality is a key dimension of brand equity of a product and maintaining it is mandatory, this rule extends to the tourism destination as well. Establishing and maintaining a quality level for a destination requires controlling all products and services "supplied" by the destination and this is something very difficult to realize. On a tourist destination, the quality can be ensured only in regards to the common objectives such as museums, reservations etc. but it is perceived in regards to accommodations and individual services. The brand is a guarantee of quality (of a certain quality). Consumers expect and are willing to pay extra for the peace of mind that a brand is providing them. "At the Same Time, visitors can also expect to pay a premium for this assurance of quality and reduction of perceived risk." (Blain, Stuarda and Ritchie 2005: 330)

- The brand equity **value** is the most recently studied dimension and is seen as part of quality, **reflected in the price paid for a product**. The importance of price in the evaluation of BE was recognized by several researchers (Echtner and Ritchie 1993). However the price is not synonymous with quality. Value does not refer to quality or price, as much as it refers to favorable or not-favorable price-quality ratio. For example, a services package can be seen as valuable, not at the expense of the high quality services, but at the expense of quality-price ratio. Consumer segments related to mass tourism focus more on value, understood as "fair value for the money".

Operationalizing the dimensions by a scale of measurement is a necessary precondition in order to isolate the dimensions of the destination.

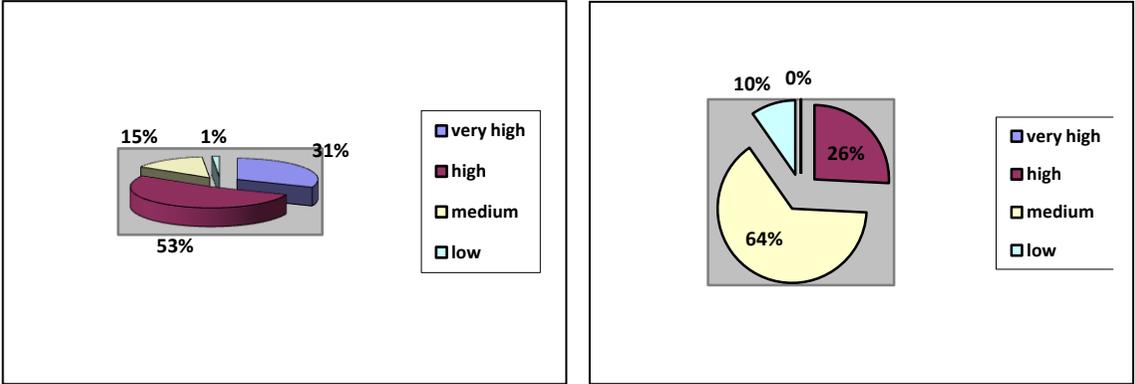
3. Research methodology and results

The research was conducted in two stages: March-April 2010 and March-April 2011.

The first phase was conducted in March-April 2010 on a sample of 1060 people from the population of Oradea city. The sampling method chosen was the stratification method (with a margin of error of 3%) and the used criteria was the age. After the criteria the distribution was chosen, as follows: 150 people aged 18-24 years, 234 people aged 25-34 years, 208 people aged between 35-44 years, 192 people aged 45-54 years, 152 people aged between 55-64 years, 124 persons aged between 65-80 years. There were investigated persons who benefited of accommodation at least once during the period 2007 - until the time of the survey. The purpose of the research was to investigate Oradea's population level of satisfaction in regards to the quality of tourist/guest services and the quality of tourism personnel services in Romania, and the results were presented in the paper "Guest services quality assesment in tourism, using an attributes scale" (Ban and Popa 2010)

The second stage of the research was conducted between March-April 2011 on a sample of 62 people, consisting of foreign tourists present in Oradea and the surrounding area, therefore active consumers of tourism services in Romania. The distribution of the sample, based on age criteria is as follows: four persons aged between 18-24 years, 6 persons aged between 25-34 years, 20 people aged between 35-44 years, 22 people aged between 45-54 years, eight persons aged 55-64 years, two persons aged 65-80 years.

The investigation on the price level perception of Oradea`s population, has produced the following results: more than half (52.6%) believe that the level of prices in Romanian tourism is high, while a percentage of 31.1% believe that the prices are prohibitively high. Summing up the percentages, 83.7% believe that the level of prices in Romanian tourism exceed far beyond what consumers are willing to pay. Only a percentage of 14.7% believe that prices are right, at a medium level, while only 1.6% of the respondents believe the Romanian tourism prices are low. Unlike the Romanian people, a percentage of 64.5% of the foreign tourists consider that the prices of tourism services in Romania are at a medium level and only 25.8% consider that the prices are at a high level. No foreign tourist investigated in this research considered that the price level is **very high**.

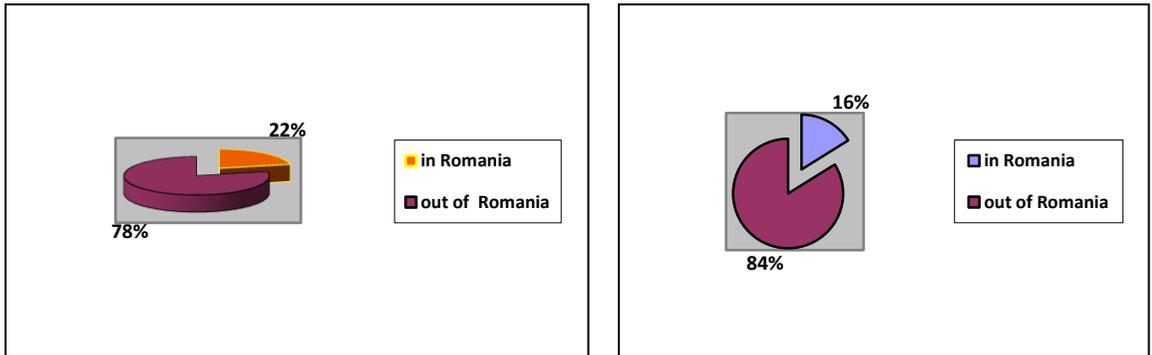


(produced by the authors)

**Figure 1 (a) Opinions of Oradea`s population in regards to the prices of tourism services
(b) Views of foreign tourists in regards to the prices of tourism services in Romania**

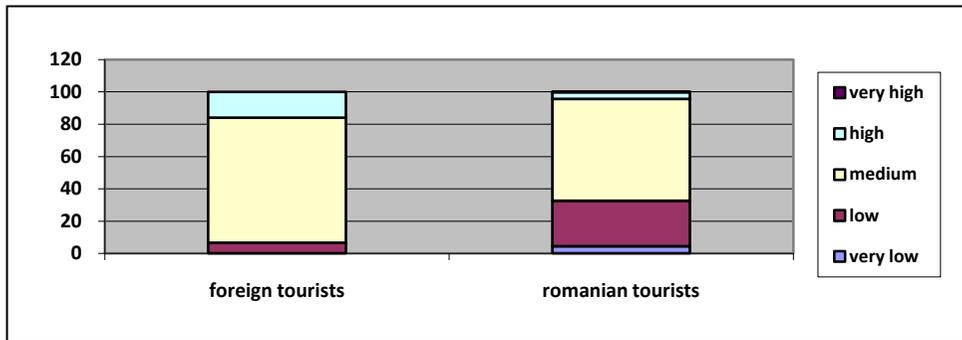
Any assessment of cost is directly or indirectly in relation to the perceived value of the product. Regarding the option for their future vacation destination, it is not surprising the relatively small percentage of those who chose Romania, but the fact that the values recorded for Oradea`s population and foreign tourists are close. The premise was that many more Romanians would choose Romania.

By using the SPSS software, was verified the type of link that exists between the desire of the foreign tourists to return to Romania (loyalty required by the brand equity) and their evaluation of the quality of tourism services in Romania. A positive correlation was identified, with a very high level of significance, which supports the idea that the choice of a tourism destination is based on the perceived quality of tourism services of that particular destination.



(produced by the authors)

Figure No. 2 (a) Opinions of Oradea `s population on future holiday destination choice (b) views of foreign tourists iin regards to their next holiday destination choice



(produced by the authors)

Figure 3. Oradea inhabitants' opinions in regards to the quality of tourism services in Romania and of foreign tourists' opinions on the quality of tourism services in Romania

4. Conclusions

The increase of the brand equity of a destination is a natural goal. The dimensions of the brand of a tourism destination are: awareness, image, loyalty, quality and value. These dimensions are building the brand equity of a destination. Between quality, image, loyalty and value there is interdependence.

The exploratory study performed on Oradea's market highlighted the link between perceived quality of tourism services, "value for money" assessment of tourism services (the value) and the potential of customers' loyalty. The results of the study conducted on foreign tourists have shown that a perception of high or very high quality of services is directly related to the option of visiting Romania and hence a perception of a medium or low quality of tourism services is related to the intention of choosing another destination. The percentage of those who wish to return to Romania is low, only 16%.

The perception of poor quality tourism services is also related to the big picture, as the countries in Central and Eastern Europe are associated with inconsistent quality, poor service of bad quality, poor quality of accommodation (Hall, 1999).

The effort of changing the reality of tourism services in Romania has to be supported by the effort of changing the image-umbrella of an entire geographic region.

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COMPARATIVE STUDY REGARDING OVERNIGHTS REGISTERED IN THE MEMBER STATES OF THE EUROPEAN UNION AND ROMANIA, DURING JUNE-SEPTEMBER 2009/2010

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Second year PhD student at the University of Oradea, under the guidance of Prof. Alina Bădulescu, within the Doctoral Research Project entitled „Doctoral studies and phd candidates for a competitive research in a knowledge-based society,” (01.10.2009-01.10.2012), I chose the presentation of this theme because after studying a number of statistics presented by Eurostat (Statistics in Focus 53/2010, 6/2011, 19/2011 etc.) we could not ignore the alarming situation regarding the number of overnights registered throughout Romania, in comparison with the other Member States of the European Union. By choosing the following research theme: „Tourism and development in the euroregional context” I felt the need to find out more answers regarding the afore mentioned problem. In consequence I started to consult the statistics recorded in our country concerning the number of overnight stays registered in Romania during the period June-August 2009/2010, in order to check whether an error has sneaked in.

Metodologia de cercetare utilizată a constat în utilizarea site-ului insse.ro, în vederea culegerii datelor reprezentative pentru perioada iunie-septembrie 2009/2010, cu privire la numărul de înnopțări petrecute de turiștii români și străini în România. The research methodology employed consisted in the use of the insse.ro site, in order to gather representative data for the period June-September 2009/2010, regarding the number of nights spent by foreign and Romanian tourists in Romania. Pentru ca acest studiu sa fie și mai reprezentativ am stabilit principalele zone turistice ale României preferate de turiștii români și străini. For this study to be even more representative I have established Romania's main touristic areas preferred by Romanian and foreign tourists.

În urma datelor culese sa confirmat, din păcate, situația prezentată de Eurostat în tabelul de la începutul lucrării cu privire la numărul de înnopțări înregistrate la nivelul României. Following the data collected, unfortunately, it has been confirmed the situation presented by Eurostat in the table at the beginning of paper on the number of overnight stays registered in Romania. Conform datelor prezentate în acest tabel, România se situează pe ultimul loc la nivelul UE, înregistrând în 2010 un procent de doar 15% din totalul nopților petrecute de ne-rezidenți la nivelul țării noastre. According to the data presented in this table, Romania ranks last in the EU, registering in 2010 a rate of only 15% of total nights spent by non-residents in our country.

Am încercat de asemenea să găsesc răspuns la următoarele întrebări: I also tried to find answer to the following questions:

Care sunt zonele turistice preferate de români? Which are Romanians' favorite touristic areas?

În ce zonă turistică a României sa înregistrat cel mai mare număr de înnopțări al turiștilor străini? In which tourist area of Romania has been recorded the highest number of overnight stays of foreign tourists?

De ce numărul de nopți petrecute de străini în România este atât de mică? Why? Why? Why? Why the number of nights spent by foreigners in Romania is so small?

Care sunt principalele curențe ale turismului românesc? Which are the main shortcomings of Romanian tourism?

La ultimele două întrebări am încercat să răspund cu ajutorul unor experți în domeniul turismului, care consideră că deși curențele prezentate există de mai bine de 10-15 ani, demersurile întreprinse în vederea ameliorării acestora, se realizează cu pași de melc. For the last two questions I tried to answer with the help of some experts in tourism, who consider that

although there presented inadequacies exist for more than 10 to 15 years, the steps taken for their improvement are achieved with the slowness.

Uniunea Europeană, România, numărul de înnoptări, rezidenți, ne-rezidenți **Keywords**
Keywords: European Union, Romania, the number of overnights, residents, non-residents

Coduri JEL:

JEL Codes: A 12

1.Introduction

Conform datelor furnizate de Eurostat în lucrarea *Statistic in Focus 19/2011:1-2*, în vara anului 2010, turismul a înregistrat creșteri semnificative față de vara anului 2009, în majoritatea țărilor europene

The second research paper in the doctoral thesis, based on the theme „Tourism-regional development relationship in economic theory”, we considered analyzing the situations of the overnights registered within the EU member states, detailing the indicator for Romania, for the main tourist regions.

According to data supplied by Eurostat *Statistics in Focus 19/2011 work: 1-2*, in the summer of 2010, tourism has registered significant growths compared to the summer of 2009, in the majority of the European countries. (*Statistics in Focus, nr.19/2011*)

Table 1. Nights spent in hotels and similar establishments, non-residents and residents, in EU (June-September 2010 compared with the same period in 2009).

*000	June-September 2009			June-September 2010			Total nights spent 2010/2009 change (in%)
	Non-residents	Residents	Total nights spent	Non-residents	Residents	Total nights spent	
EU-27	325581	383169	708750	346547	383498	730045	3.00%
BG	3822	2232	6054	4106	2463	6569	8.50%
BE	7458	2183	9641	8427	2296	10723	11.20%
CZ	6368	4050	10419	6781	4098	10879	4.40%
DK	2124	2302	4426	2493	2480	4973	12.40%
DE	17685	70793	88478	20389	74021	94410	6.70%
EE	1187	354	1541	1388	382	1770	14.90%
IE(1)	7373	3616	10989				
EL	34453	10220	44673	35003	8964	43967	-1.60%
ES	71038	51709	122747	78961	52882	131843	7.40%
FR	29945	50945	80890	31176	52220	83396	3.10%
IT	53006	80551	133557	55641	78211	133852	0.20%
CY	6270	853	7123	6606	762	7368	3.40%
LV	762	337	999	883	291	1174	17.60%
LT	665	298	963	755	350	1105	14.70%
LU(2)	457	27	484				
HU	3515	3385	6900	3697	3429	7126	3.30%
MT	3042	139	3181	3463	131	3594	13.00%
NL	5707	6630	12337	6569	7046	13616	10.40%
AT	21729	9010	30739	22201	9378	31579	2.70%
PL	3335	6704	10039	3584	7592	11176	11.30%
PT	10888	6490	17378	11436	6732	18168	4.50%
RO	1085	7573	8658	1176	6451	7627	-11.90%
SI	1715	899	2614	1775	839	2614	0.00%
SK	1209	1341	2550	1229	1444	2743	7.60%
FI	1651	4435	6086	1730	4635	6365	4.60%
SE	3054	8117	11171	3313	8570	11883	6.40%
UK	26038	48075	74113	25863	44189	70052	-5.50%

(1),(2) EU-27: 2010 IE and LU data not available.

Source: made by author based on data collected from the work Statistics in Focus, nr.19/2011: 2, available on: http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-SF-11-019/EN/KS-SF-11-019-EN.PDF

LEGEND (Country codes):			
EU-27 European Union			
BG: Bulgaria	EL: Greece	LU: Luxembourg	RO: Romania
BE: Belgium	ES: Spain	HU: Hungary	SI: Slovenia
CZ: Czech Republic	FR: France	MT: Malta	SK: Slovakia
DK: Denmark	IT: Italy	NL: Netherlands	FI: Finland
DE: Germany	CY: Cyprus	AT: Austria	SE: Sweden
EE: Estonia	LV: Latvia	PL: Poland	UK: United Kingdom
IE: Ireland	LT: Lithuania	PT: Portugal	

Both in summer 2009 and in 2010, 70% of the number of nights recorded in tourist reception structures (with tourist accommodation functions) in the EU, are held by five countries namely: Italy (18.3%), Spain (18.1%), Germany (12.9%), France (11.4%) and United Kingdom (9.6%). (Table 1).

2. Comparing the number of nights spent by resident and non-resident tourists at the EU level during June-September 2009/2010

Numărul de înoptări înregistrate de **ne-rezidenți** (2) în sezonul de vară (iunie-septembrie) din 2009-2010.

The number of overnight stays by **non-residents** (2) in summer (June-September) of 2009-2010. In Table 1, it can be observed that among non-residents' favorite destinations are Spain, Italy and Greece (in 2009 as well as in 2010) these take hold of almost half of all those nights recorded in the EU. Proceeding with the comparison of the two years (2009 and respectively 2010) can be seen that the number of overnights spent by non-residents recorded an increase in 2010 in all member countries, except United Kingdom.

Thus, in 2010, the most representative increases, of over 80%, are registered in Cyprus and Malta (89.7% and 96.4%) and the lowest increase, of only 15%, in Romania. (Statistics in Focus 19/2011: 2)

The number of overnight stays by **residents** (3) in summer (June-September) of 2009-2010.

Following Table 1, in terms of resident tourists, in 2010 can be observed an increase in the number of overnight stays from 2009 in most member states of the EU, except in the following countries: Romania (-14.8%), Cyprus (-10.7%), United Kingdom (-8.1%), Slovenia (-6.7%), Malta (-6.2%) and Italy (-2.9%). (Statistics in Focus 19/2011: 2)

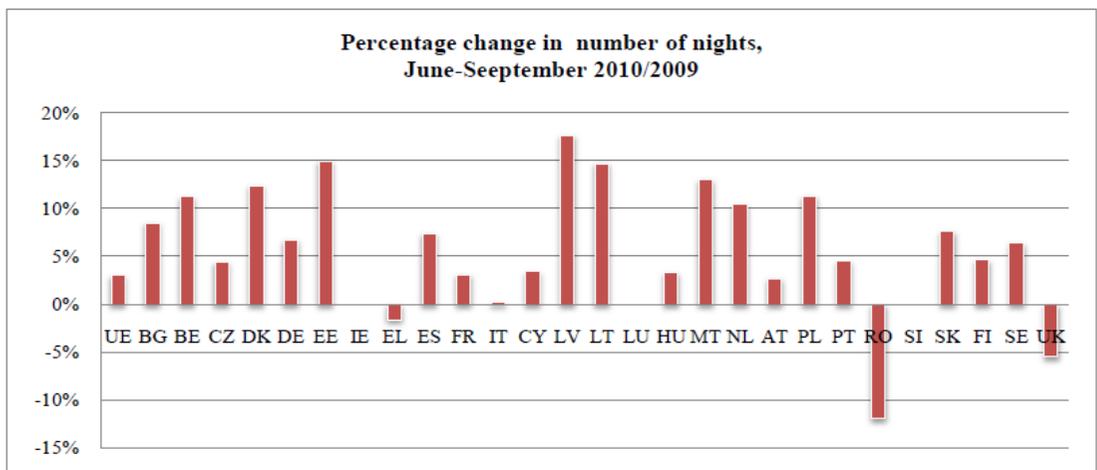


Figure 1. Procentage change in number of nights in hotels and similar establishments, June-September 2010 compared with the same period in 2009.

Source: made by author based on the data collected from the work Statistics in Focus, nr.19/2011:2 available on: http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-SF-11-019/EN/KS-SF-11-019-EN.PDF

Comparing the summer months (June-September) of 2010 with those in 2009 has been registered a growth of 3% in the number of overnight stays (1) at European Union's level. The most significant increases were in: Latvia (+17.6%), Estonia (+14.9%) and Lithuania (+14.7%), while in Romania, United Kingdom and Greece can be noted a decrease in the number of overnight stays, compared to 2009, with: -11.9% (RO) -5.5% (UK) and -1.6% (EL) (Fig.1).

3.Comparing the number of nights spent by residents and non-resident tourists in Romania for the period June-September 2009/2010

România deține un potențial turistic bogat, reliefat prin două componente esențiale: Romania has a rich touristic potential, highlighted by two key components:

-*componenta naturală* , caracterizată printr-un relief variat, condiții climatice favorabile, peisaje pitorești, izvoare și lacuri cu rol terapeutic etc. *The natural component*, characterized by a varied landscape, favorable weather conditions, picturesque landscapes, springs and lakes with therapeutic effects etc.

-*componenta antropică*, caracterizată prin vestigiile arheologice, monumente istorice și de arhitectură, muzee, case memoriale etc. *The anthropogenic component*, characterized by the archaeological vestiges, historical and architectural monuments, museums, memorial houses, etc.

Among the most representative touristic areas of Romania are distinguished: (Monthly Statistical Buletin number 12/2009:95 and 12/2010:95).

-stațiunile balneare Spas resorts;

-stațiuni din zona montană Mountain area resorts;

-stațiunile din zona litorală (exclusiv orașul Constanța) Seaside area, excluding town of Constanța;

-Delta Dunării (inclusiv orașul Tulcea) Danube Delta area, including town of Tulcea;

-București și orașele de reședință de județ (exclusiv Tulcea) Bucharest and towns country residence, excluding Tulcea;

-Alte localități și trasee turistice Other localities and tourists routs.

O scurtă prezentare a acestor zone turistice. A brief overview of these touristic areas. (Romanian Tourism, 2010:7-8, Statistical Breviary)

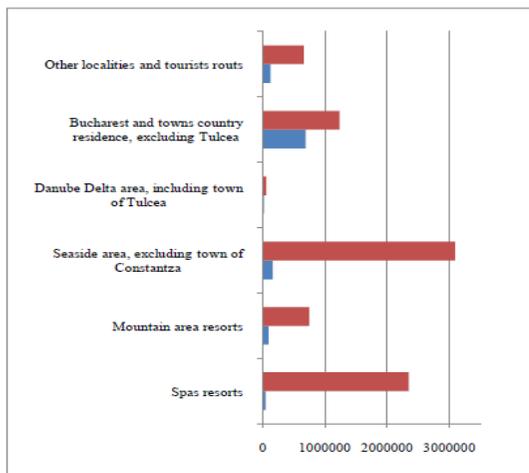
Stațiunile balneare se remarcă prin renumitele baze de tratament și zonele de agrement din stațiunile Băile Felix, Băile Herculane, Băile Tușnad, Călimănești-Căciulata, Covasna, Sovata, Vatra Dornei etc. *The spas* are distinguished by the renowned treatment facilities and recreational areas from the resorts of Băile Felix, Herculane, Tusnad, Călimănești-Căciulata, Covasna, Sovata, Vatra Dornei etc.

Zona montană cunoscută prin renumitele stațiuni turistice: Poiana Brașov, Sinaia, Predeal, Bâlea, etc., oferă numeroase posibilități de agrement, pârtii și instalații pentru sporturile de iarnă. *The mountain area* is known for its famous touristic resorts: Poiana Brasov, Sinaia, Predeal, Bâlea, etc. and offers many recreational opportunities, ski slopes and facilities for winter sports.

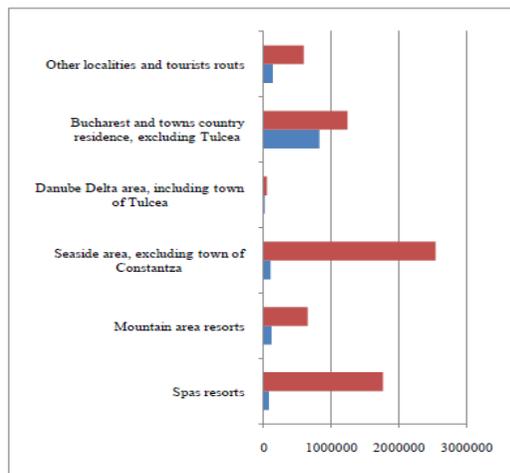
Litoralul românesc se întinde pe o lungime de 245km, cu Delta Dunării și cu complexul de lagune Razim-Sinoe în partea de nord, iar în partea de sud se întinde litoralul turistic propriu-zis pe o lungime de aproximativ 70km. *The Romanian seaside* has a length of 245km, with Danube Delta and Razim-Sinoe lagoon complex in the north and in the south part lays the touristic seashore itself over a length of about 70km. (Turismul României, Breviar turistic, 2010:6-8).

București, capitala țării, deține un potențial semnificativ în ceea ce privește dezvoltarea turismului de afaceri și cel urban. *Bucharest*, the capital of the country, has a significant potential in terms of tourism development and urban affairs.

În ciuda acestei oferte bogate turismul din România nu se bucură de o atenție mărită din partea turiștilor străini. Despite this rich offer tourism in Romania is not enjoying of an increased attention from foreign tourists. (Figura nr.2 și Figura nr.3) (Figure No. 2 and Figure No. 3)



■ - residents



■ - non-residents

Figure 2. Nights spent in hotels and similar establishments, non-residents and residents, in RO (June-September 2009).

Figure 3. Nights spent in hotels and similar establishments, non-residents and residents, in RO (June-September 2010).

Source: made by author based on the data collected from the work Monthly Statistical Buletin number 12/2009:95 available on site: http://www.insse.ro/cms/files/arhiva_buletine2009/bsl_12.pdf and 12/2010:95 available on site: http://www.insse.ro/cms/files/arhiva_buletine2010/bsl_12.pdf and from the document The attendance of tourist reception structures with accommodation functions during 1.I-30.IX.2010 :73-78.

From the data collected from the Monthly Statistical Bulletin 12/2009: 95, comes out that the summer season (June-September) of 2009, the overnight stays of the Romanian tourists in the tourist reception structures represent 88% of the total number of overnight stays, while the overnight stays of foreign tourists represented only 12%, data released by Eurostat and Statistics in Focus 19/2011 document.

In 2010, compared with the same period in 2009, the number of the overnight stays made by Romanian tourists represents 85% of the total number of overnight stays, while the overnight stays of the foreign tourists represented 15%, a very small percentage compared with other EU states.

From the two figures (Figure No. 2 and 3) comes out that the main destination of the Romanian tourists are the seaside and the spas. If we look at this issue in terms of foreign tourists we can see a shift towards business tourism, Bucharest and county seats are the main touristic areas that stand out. (Figure No. 2 and 3).

4. Conclusion - Which are the main deficiencies of the Romanian tourism?

This question was addressed to some of the most important investors and professionals in the country. http://www.financiarul.com/articol_53156/turismul-romanesc-prins-in-acelasi-cerc-vicios-timp-de-20-de-ani.html

Experts' answer:

Președintele Marshal Turism, domnul Ion Antonescu, afirmă că o primă frână a dezvoltării turismului este *nivelul ridicat al fiscalității*. Marshal Tourism's President, Mr. Ion Antonescu, says that the first brake of tourism development is the *elevated level of the taxation*.

Radu Enache, Președintele Continental Hotels și Joseph Goschi, Președintele Unita Turism afirmă că principalul factor negativ în dezvoltarea turismului autohton este *calitatea slabă a infrastructurii*. Radu Enache, President of Continental Hotels and Joseph Goschi, President of

Unita Tourism says that the main negative factor in the development of local tourism is *the poor quality of the infrastructure*.

Principala carență este Legea Turismului spune domnul Tinu Sebeșanu, directorul executiv al Trend Hospitality. *The main shortcoming is Tourism Law* says Mr. Tinu Sebeșanu, executive director of Trend Hospitality.

Doamna Lucia Morariu, Președintele Eximtur, consideră că principalele curențe ale turismului Românesc sunt *starea proastă a infrastructurii și slaba motivare a personalului care lucrează în acest domeniu*. Ms. Lucia Morariu, the president of Eximtur, believes that the main shortcoming of the Romanian tourism is *the poor state of the infrastructure and the feeble motivation of staff working in this domain*.

„*The prices on the seaside are a little too big for our taste. Prices are decisive in choosing travel destinations,*” says Detlef Höhne, product manager for Romania of the TUI. <http://www.gandul.info/financiar/grupul-tui-este-nemultumit-de-litoralul-romanesc-udrea-promite-sa-rezolve-o-parte-din-probleme-8047086>

„*Nu sa schimbat nimic în ultimii 10-15 ani*, este prima concluzie care poate fi extrasă din răspunsurile de mai sus. *Nothing has changed in the last 10-15 years*”, is the first conclusion that can be extracted from the responses above. „După zeci de ani de capitalism turismul românesc continuă să se afle la coada Europei în ciuda reliefului bogat de care dispune... Persistă o serie de probleme nerezolvate, devenite deja acute: starea jalnică a infrastructurii, fiscalitatea prea mare, lipsa unor strategii coerente e”” *After decades of capitalism Romanian tourism continues to be the tail of Europe*” and despite the rich landscape that has in its possession ... „*There are still a series of unsolved problems that have already become acute: the dilapidated state of the infrastructure, excessive taxation, lack of coherent strategy etc.. În interiorul acestui cerc vicios se află turiștii care se plâng de calitate slabă a serviciilor comparativ cu tarifele existente.... Inside this vicious circle are tourists who complain about services' poor quality compared to the existing rates.*” http://www.financiarul.com/articol_53156/turismul-romanesc-prins-in-ancelasi-cerc-vicios-timp-de-20-de-ani.html

Note:**1.Overnights:**

-It is the interval of 24 hours, starting at hotel time, for which a person is recorded in the tourist accommodation space and benefits of hosting in the account fee for the occupied space, even if the actual duration of the stay is less than the mentioned interval. Also taken into account are the overnights related to extra beds installed (paid by customers).

-It represent each night for which a person is registered in a tourist accommodation unit, whether or not physically is present in the room. (<https://statistici.insse.ro/shop/>)

2.Non-residents (foreign tourists). Țara de origine a turistului străin care înnoptează într-o unitate de cazare turistică, se stabilește după țara de reședință a turistului. Country of origin of the foreign tourist that stays overnight in a tourist accommodation establishment, it is determined by the country of residence of the tourist. (<https://statistici.insse.ro/shop/>)

3.Resident (local tourist). Tourists who travel within their own countries.

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HOLON APPROACH IN NEED OF COMPANY RESTRUCTURING

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Holon concept of systems theory and systems developed in after 80s of last century. The term holon (Greek: Hales = whole, derived from parts) was taken over by specialists in the field of systems, from the American Professor A. Koestler, who first used in the context of the systems division, talking about systems that operate in other systems. The holon is essentially an operating system under which one or more autonomous systems, integration.

The holon is integrative role that optimizes operation and results of embedded systems, limiting excessive generalization of the classical notion of system. This approach assumes that there are quite a few companies in the state of "vitality" or less and those who remain in a state of alert and that in most cases, even a viable business, reservations, or to increase the effectiveness of that maintaining this state requires some effort, area businesses in "difficulty" or "vulnerable" under these conditions is expanding.

KEY-WORDS: holon system, restructuring, analysis diagnosis, risk analysis, risk of bankruptcy.

JEL Classification: M – Business Administration and Business Economics; Marketing; Accounting

M1- Business Administration, M19 - Other

In our approach to implementing the elements of holon theory analysis of the vulnerability at the company will break both structurally as a productive enterprise, the autonomous subsystems (profit centers, strategic business units) and in terms of functional subsystems (management, supply, marketing, decision making, information, etc..).

This decomposition is done so by objectives system (Goal Analysis) and its behavior (Behavior Analysis). This vision corresponds to the holon concept systems approach that, in our view, combines and optimizes the criteria of division of the system, referred to (functionally and structurally). Holon system (Fig. 1) integrates, in general, more autonomous systems, which are always open for different holon components and functions as part of a general system components - the classic and the optimization does not only optimize system components and system integrator.

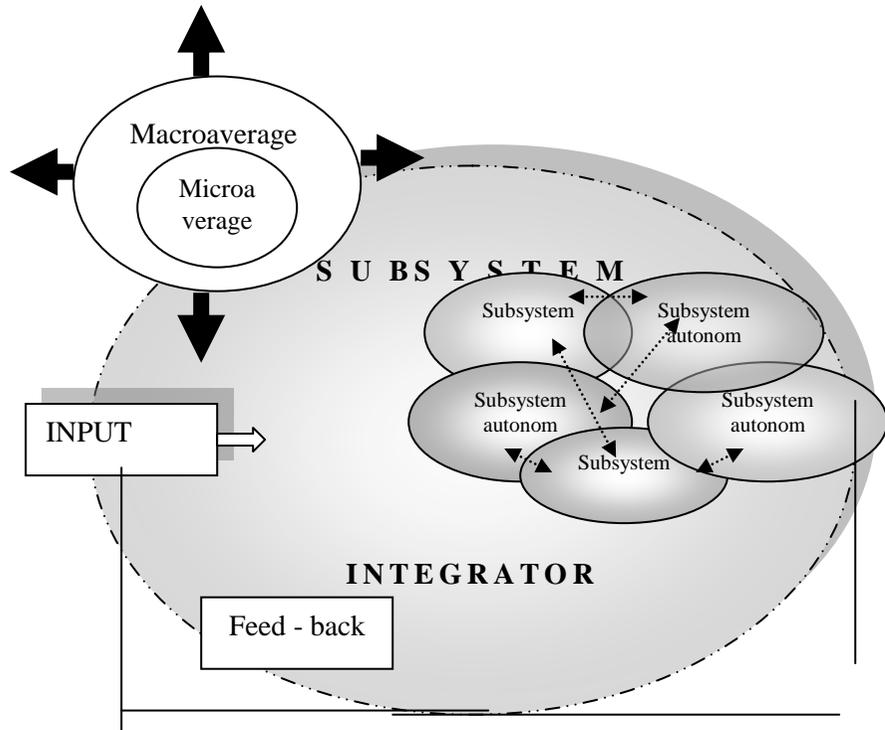


Fig. 1. Enterprise - a system open holon

Given the above, we define the firm as an open economic system that groups a set of subsystems, autonomous or not organized on economic, legal, technological and managerial, which are conceived and carried out a complex work in order to obtain products and / or services to market and aiming to maximize the final wealth for its owners.

Holon vision is therefore one that reconciles all the parties that compose it. Holon is a system of unique identity, self-contained, identifiable, is part of a larger system (holon system integrator), and in turn may consist of holosubsysteme.

The organization consists of Holons (holosubsysteme autonomes), in that they are able to develop and pursue their own plans and strategies, but which operate synergistically to achieve the overall objectives of the enterprise. The company's management holon represents a set of management processes and resources that work together on a specific organizational structure and the information derived to achieve the overall objectives of the company through control over resources and processes in holons.

Holosubsystems behavior is closely controlled by the system integrator Holon's top management down the organizational hierarchy based on well-defined procedures and integrated information technology.

Its role is essential, suggesting that each holon theory is composed of two parts: the information processing and physics processing. Holosubsystems control is achieved at the interfaces of interaction between them. While hierarchy is permanent system integrator holon, holonsystem structure is flexible and can withstand holon separation or integration of new others.

So, matrix-type organizational structures are themselves a consequence of the emergence of flexible management systems using an approach essentially holon. These systems, together with the integrated system will provide higher levels of analysis as the criteria for analysis will be

adapted to these levels and sublevels corresponding systems (autonomous or not) that make up the two systems analyzed.

Holon vision allows the new system more flexible, more efficient, less vulnerable and more adaptable influences disturbances within the system or the environment. The aim of our approach is more efficient and increase economic profitability of enterprises "sick" by their restructuring.

For a system should be restructured its analysis as a whole and on its components business or activities that may be relatively independent. This can be identified strengths, viable, the system integrator or its vulnerabilities, vulnerabilities arising either independent components of the system or those subsystems that are designed to integrate into the global enterprise.

Paraphrasing a famous specialist in systems (J. Gall, the Systemantics) we can say that if a company seems ineffective or even useless, does not mean that it is in reality but rather a component subsystems, even though they appear to work correctly, are in fact, bankrupt. This is because, as a system is more complex, with both possibilities and its failure modes are more complex.

To improve the activity of a business, you must first know, to investigate, to identify vulnerabilities. Role of system analyst can thus be limited to "radiography" of the situation, identify relevant activities and events to facilitate a critical analysis of how the current system operating in developing enterprise restructuring alternatives.

A restructuring can not be done without a system analyst and / or manager to have a systemic vision of the company. This involves, first, decomposition holosubsystem, system, correct identification of borders and the interactions between them and between the system and environment in which the company operates.

These elements are defined by the analyst depending on the objectives and goals holon system analysis. The analysis and description system analyst holon must take into account the need to increase efficiency and system performance objectives and their ability to adapt, self-directed learning model that simulates the operation of the system.

Practically, given the "uncertainty principle" which says that a system can be defined according to the analyst's vision, we intend to shape our vision for the company alongside the classical.

Thus, we address the enterprise as a holon, in which one can identify holosubsystems autonomous system integrator (company) with the role functioning and optimize their results, the final objectives of the integrated system itself depending on how it operates and the relationship between holosubsystem.

The main elements identifying the company as a system both holon as its subsystems can be grouped as follows:

1. Point stable, dynamic, progressive. Profit, turnover, market share,
2. Inputs of resources: raw materials, machinery, energy, human resources, information, etc.,
3. Outputs: products, services, work, money., Information,
4. Relationships: system - environment inter - systems, inter - subsystems, autonomous systems - sub-human, human - means of production, technological structure,
5. Transformation processes: production, managerial, informational, organizational,
6. Environment: economic, financial, social, political, legal, information.

From the point of view of the activity, system integrator of enterprise holon is a stochastic but productive autonomous systems that compose it deterministic nature.

Stochastic nature of the system integrator is given, on the one hand, the probably nature of the occurrence of events internal disrupters (inadequate supply, failure of production capacity, the correlation of structure and volume production with demand, wage claims, etc..) Or external (reduction of market segments, the emergence of substitute products, the emergence of new technologies, etc..), on the other hand the probably nature, namely how the managerial system,

the information - making and their subsystems have the ability to respond effectively and timely the internal or external distractions.

Moreover, restructuring is just one of the purposes of increasing the efficiency and effectiveness of enterprise response to environmental changes, that are correct delimitation precise knowledge of the status and operational characteristics of production systems, because they behave like deterministic systems.

The restructuring of production systems involves determining the productive efficiency of each system separately, and then the separation efficiency of the system integrator or settlement systems or by attaching another effective enough, the feasibility criteria, increase synergy and system-level holon entropy reduction of the company.

The restructuring of the management system involves a redefinition and a clear delineation of objectives and the overall system components, subsystems redesign management - organizational, methodological - the managerial and information - to make the decision to set goals and achieve an optimal and objectives of production systems.

Holon vision allows posting and even total replacement of the subsystem management - organizational or informational - not only decision-productive systems. If, for example, the restructuring would involve full or partial takeover of the firm by an enterprise (company) stronger and, in turn, has a holonic structure, it will be able to integrate productive business acquiree and its attachments may be extended or management or information system in order to manage, control and strategic focus.

This aspect constitutes an additional argument of the enterprise holon approach and way of accomplishing the work of its analysis of vulnerabilities.

In terms of behavioral structure, the holon system's internal connections, it is an open system with the management system that integrates it into the system and which receives inputs and disturbances in the environment, through influencing the information system - decision-making inputs into the productive.

In this case, due to interference of the management system, subsystem information - making and productive systems, those systems are considered automatic response block for the topping - the border into the system management subsystem, and the reception information and the disturbance occurs its information system - decision-making.

The holon is thus optimally adapted to an open architecture system, given the nature of self-management system on the productive systems are conventional adaptive automatic.

Holon of the restructuring approach is broader, including the companies with greater or lesser vulnerability and assumes that there are quite a few companies in the state of "vitality" or even less those who persist in a state of vitality and that in most cases, even a viable business, there are reserves to increase the effectiveness of maintenance in this state or that requires some effort, area businesses in "difficulty" or "vulnerable" under these conditions is expanding.

In this vision, our area of interest includes not only companies in difficulty (in the narrow sense) or vulnerable (difficulty in the broad sense) but can extend even to the components of viable but likely to become vulnerable in the future. In this vision, scope and scale of the restructuring process and the content and implementation modalities will differ from case to case.

In these circumstances, we believe that the restructuring should not be viewed as necessary only entities in difficulty (narrowly defined), but it has started long before undertaking to reach this situation, namely in the phase where the degree of vulnerability it requires.

It is not enough to fit difficult undertaking but it is necessary to identify the correct business vulnerabilities, their location and measurement system and future effects on the state enterprise - the pre-phase of the restructuring process.

They are different and the stages through which we continue in this work, since the results of this analysis depends on timing, scope and content of the restructuring process and hence protect the

interests of business owners and others interested in the smooth running of the company: stakeholders: employees customers, suppliers, banks, state, etc..

In the literature, "the health of the company" is assessed in two stages:

- Diagnostic Analysis (DA)
- Risk Analysis (RA).

In most cases the way of systematizing the results of diagnostic SWOT analysis, poor; to deduce how vulnerable it is undertaking, it appears paradoxical situation of making an "analysis" of the "diagnostic analysis".

Risk analysis methodologies, approaches in most cases, the state company at a time, finding opportunities or business risks, using qualitative and quantitative criteria - criteria that reflect vulnerability to synthesize enterprise.

For example, bankruptcy risk is analyzed by methods that aim to reflect the quality criteria and indicators, all enterprise system vulnerabilities, including those related to its relationship with the environment.

These methods, however, do not give a sufficiently well defined picture of the future business, especially in economies in transition, where the company's financial results are subject to great volatility over time, so that a company with a reduced risk of bankruptcy, measured when $t-1$ ", comes when the " t "have a very high risk of bankruptcy, and when" $t+1$ "to restore" smooth "or be on the verge of bankruptcy.

The causes of instability should not be sought only in business but also some shortcomings of the methods of measuring the risk of bankruptcy, some of these shortcomings were removed from scoring method.

Methods "traditional" bankruptcy risk analysis were processed and adapted and transition economies - that is applied to Romanian companies, leading companies already established methods with results (predictions) more or less successful in forecasting the likelihood of bankruptcy.

Not always, the same enterprise application of these methods give the same results, because the views and criteria of analysis, so that the vulnerability of the enterprise can be assessed differently from the application of various methods.

Without challenging theoretical and practical value of these models to analyze the risk of bankruptcy, we summarize their analysis and criteria we use in enterprise vulnerability assessment, consistent with the objectives of this paper.

The aim of this approach is therefore to delineate the object and research area and not to devise a new method for assessing the risk of bankruptcy, and later to measure the vulnerability of the company through the synthesis and breakdown of these criteria to locate vulnerabilities in the system Holon, holosubsystems and environment of the company, as its starting point in restructuring and improving economic performance - financial enterprise as a system holon.

Analyzing these methods can be easily drawn the conclusion that they operate with two broad categories of indicators, namely:

- Indicators that express the company's ability to generate profit, so the profitability indicators of the nature or yield (based on size of operations or financial profit);
- The direct or indirect indicators expressing the company's financial balance (indicators of liquidity, solvency, asset and capital structure, the rotation.

This mode of assessment can be argued, at least the following aspects:

- The result reflects the efficiency of production operations at both execution and at the managerial level to the lower peak.
- The financial result reflects the manner and efficiency with which financial resources are provided and managed the company as a result of policy and debt financing needs.

- Change in cash flow is an indicator that reflects the input and output of capital (own and attracted) and makes the financial balance at the same time is conditioned by how donors perceive the company's financial balance.

Change in treasury, provides, as mentioned, a perfect definition of the dynamic state of the enterprise, as reflected by FR and NFR, and asset size and capital structure, the rotation of operating assets and liabilities, while at the same time reflects a balance between receipts and payments respective operational and financial investment.

DISCUSSION AND CONCLUSIONS

It is imperative that when we talk about restructuring at the enterprise level, we know exactly what the restructure, which are viable activities, which are its vulnerabilities and are the major trends and opportunities in business, restructuring elements that give directions . Such an analysis, from our point of view, it is not possible without a systemic vision of the organization valences Holon.

For the enterprise as an economic system to function, it must be controlled, which requires communication. Information provided by the communication must be sufficiently detailed, accurate and timely, to be used as a basis for decision. Based on this information, the control system is achieved by two techniques holon technique feed - back (control reagent) and fast technique - forward (anticipatory).

In view of Holon, restructuring is a “modus vivendi” of businesses / companies, even those Romanian, whether initiated pre-or post - privatization, since any undertaking shall, under pressure from shareholders and other interest holders, to Standing focus attention on growth and business expansion.

If the pressure is manifested most active shareholders in the U.S. in recent years it occurs equally in Europe, and is expanding due to globalization, the economic world.

On the other hand, the competition always requires a rethink of the company's position on a “permanent competitive Sleep” and last but not least, the employees are interested in expanding in order to benefit as many opportunities to achieve career and personal safety jobs.

Surveys conducted in the U.S. and Britain have found that most companies are proposing an average growth rate of 15-16%, while average growth rate does not exceed 3%, it is clear that not all companies do this.

Development pathways related primarily to increase the share or market penetration of current business and business integration holon vertical and horizontal or conglomerate, including the expansion into other geographical areas (globalization).

Deemed essential that the restructuring process, even the Romanian enterprises to meet this feature of the process going and to take account of these phenomena.

These are just some of the reasons why, as in the preliminary phase, to measure its vulnerability - in which we presented in detail valences on systems design holon, holon characteristics and its pedagogical approach to business - using a holonic approach to process restructuring.

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INVESTMENT STRUCTURE AND EVOLUTION IN THE CONTEXT OF ECONOMIC CRISIS

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The scope of this article is the evolution analysis of net investment in Romania between economic growth and international economic crisis. The analysis captures both the evolution of net investment by structure elements (buildings, outfits, other investments) and the structure and evolution of investments by sources of financing. Also there is an analysis of the foreign direct investment (FDI) share in the total net investment and the impact of the economic crisis on this share. The article aims to identify the main factors for the evolution of investments in Romania before the financial crisis and determine how the financial crisis influenced the structure and volume of investments in the national economy.

Most previous studies have focused either on a small part of the investments made in Romania (in most cases the FDI have been analyzed) or on the period of economic expansion without capturing the evolution of investment during the economic crisis. Previous research has highlighted especially the FDI influence on macroeconomic indicators of high importance for the economy (unemployment rate, GDP growth rate, etc.) with less focus on the factors influencing these investments and the close connection between the economic context (economy status) and the volume of these investments.

For the analysis of the investment evolution during the mentioned period statistical data was used that captured both the investment evolution trend and the changes occurred by the national economy stepping into recession amid the global financial crisis established. To get an overview of the situation it was considered a time interval that captured both the economic growth and the period after the onset of the economic crisis. Thereby information was obtained on the volume of net investment during 2000-2010, on foreign direct investment in the period 2003-2010 and their share in total net investment and also on the main sources of investment financing during the economic growth and the influence of the economic crisis on the structure of these funding sources.

The analysis of this information and results allowed drawing conclusions on the impact of the economic crisis on the volume and structure of investment in Romania, on the main sources of financing used by investors in times of crisis and regarding main courses of action to stimulate investment activity in order to re-launch economic activity.

Keywords: *Net Investment, Romania during crisis, foreign direct investment (FDI), sources of investment founding, investment evolution*

JEL code: *D920*

Introduction

Internationalization and globalization of economic affairs, of industrial production, of the movement of financial capital, determines the investment activity to become of global nature, with implications for all national economies and the entire global economy.

Investments are the material basis of social and economic development of any country. They provide quantitative and qualitative growth of fixed capital, increase in technical and economic efficiency of existing capital, but also create new jobs.

There are three major areas of traditional investment opportunities (except gold, art works and goods), namely: fixed interest securities, companies' shares and capital goods and real property. Net investments represent expenditures for construction, installation and assembly works, equipment and transport means purchasing, and other expenses for creating new fix assets for developing, modernizing, rebuilding the existing ones, as well as the value of services related to the transfer ownership of existing fix assets and lands (notary duties, commissions, transport, loading and unloading expenditure) etc..

Net investments comprise the following structure elements: construction, outfits (with or without assembly), geological and drilling works, other net investment. Depending on the source of financing, net investments can be classified as: investments financed from own funds, investments financed from internal and external loans, investments financed from the state budget and local budgets, investments financed with foreign capital, and investments financed from other sources.

Foreign direct investments are considered paid-up capital and reserves falling to a non-resident investor owning at least 10% of the subscribed capital of a resident enterprise, the loans between the investor and the company he invested in, and profit reinvested by him.

There are three types of foreign direct investments, namely:

- Greenfield - creation of enterprises by or with foreign investors (Greenfield investment);
- Mergers and acquisitions - full or partial takeover of enterprises by foreign investors from residents;
- Business development - increasing holdings of foreign investors in foreign direct investment enterprises.

Whether we consider a period of economic expansion or recession, investments are the main engine of economic growth and development or, as the case may be, of revitalizing economic activity in times of recession and financial crisis. In Romania's case, with an emerging economy, investments have a decisive role in ensuring the modernization of economic activity as a prerequisite to adapting technical and economical conditions of passage of the national economy to a market economy, our country's participation in international economic relations in conditions of competition and competitiveness.

Investment Evolution in Romania

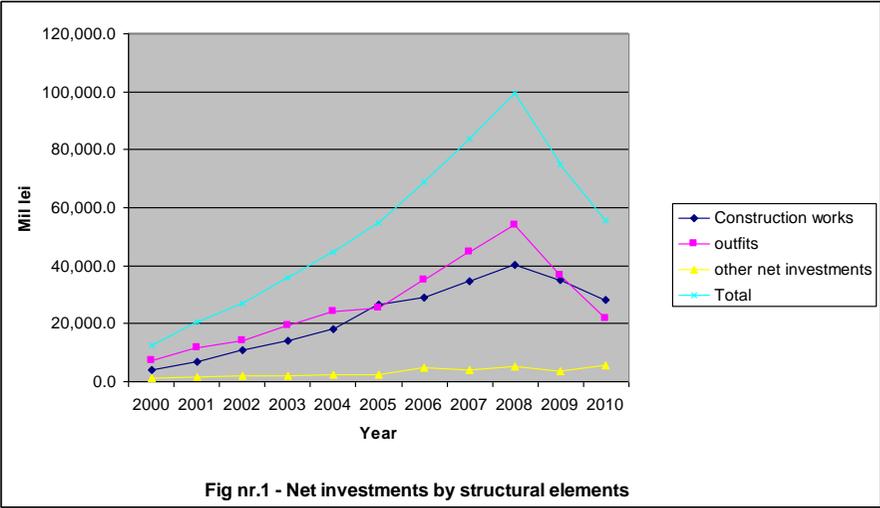
Tracking the investments history in the national economy over the past 20 years, four periods of the economy can be defined. Overall, investments in the national economy grew approximately three times in the last 20 years, from about 7 billion dollars in 1990 to around 19 billion dollars (55.6 billion lei) in 2010. GDP has seen a similar evolution, increasing four times in the same period.

- the first stage was represented by a period of investment decrease (1990-1992)
- the second stage is represented by the period 1993 to 1999, during which investments have had a tendency of stagnation or slight increase
- the third stage covers the years 2000 to 2008, a period of strong increase of investments in the national economy, from 12.5 billion lei in 2000 to about 99.5 billion lei in 2008, thus resulting in an increase of about 8 times compared to 2000
- the fourth stage is the period of economic recession and covers the period from 2009 until present day, during which investments have dropped almost to half of the level recorded in 2008

The purpose of this study is the period between the years 2000 to 2010, that is stages three and four of those mentioned above. More specifically, this period includes an exponential growth in

the volume of net investments stage, from a level of approximately 12.5 billion lei in 2000 to a peak of about 100 billion lei in 2008.

The evolution of total net investments and on structure elements is shown in the chart below:



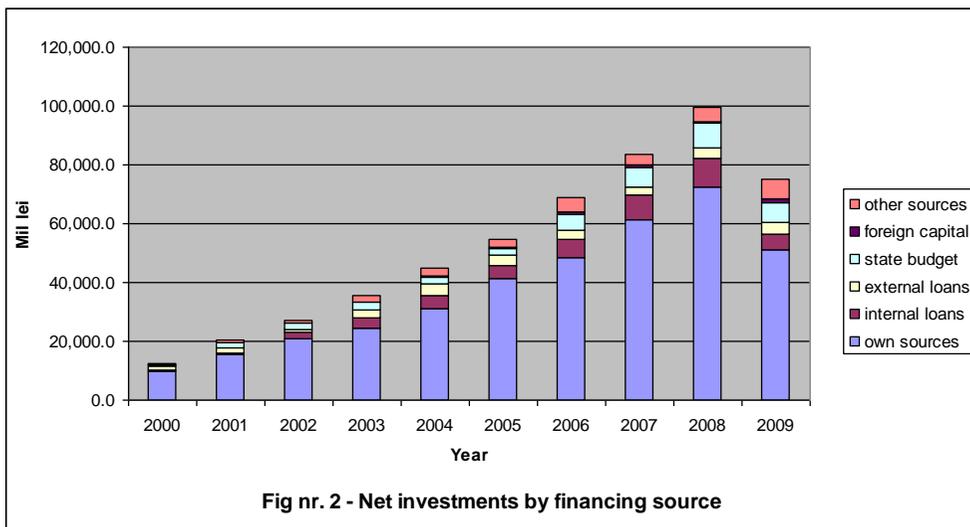
Looking at the chart above, some important ideas about the evolution and structure of investments in the analyzed period can be stated, namely:

Firstly, we can see that the net total investments grew rapidly in the first years analyzed and slower in recent years. Thus in 2000-2001 there was an increase of over 60% of net investments, from 12.5 billion lei to about 20.5 billion lei. In the following periods (2001-2002 and 2002-2003), increases were approximately 30% over the base year. Growth during 2004-2006 was approximately 25% compared to previous years, and growth during 2007-2008 was approximately 20% annually. The maximum total net investments was achieved in 2008, their value being about 99.5 billion lei.

Secondly, it should be noted that, in the last two years of analysis, amid the financial crisis took place a drastic decrease in the volume of annual net investments, a decrease which meant in 2010 a net investment value of approximately 55% lower than the peak year 2008.

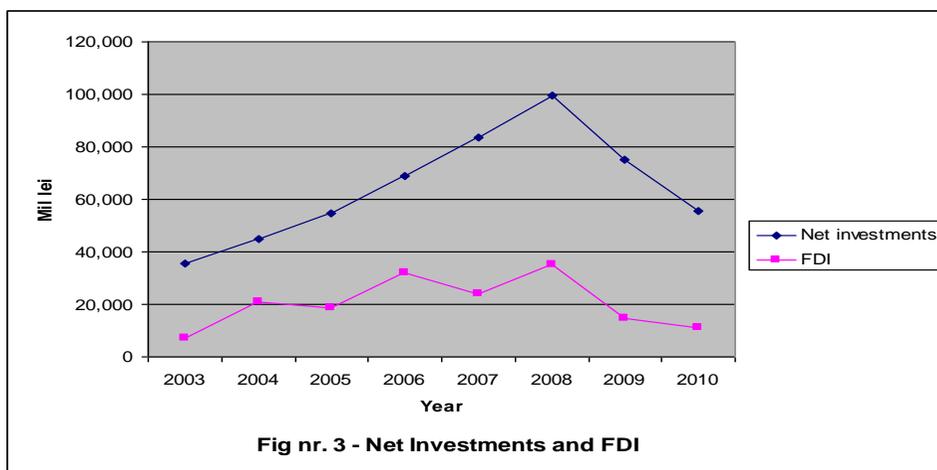
Thirdly, the structure analysis of investments in the analyzed period allows observing the fact that, except for the years 2005 and 2010, the main share of total investments was represented by equipment (including means of transportation).

Another classification of total net investments of special importance for understanding their evolution in the analyzed period is represented by total investments division based on the funding source. This classification allows us to identify the main sources of financing preferred by investors in economic growth period and how these preferences have changed in the context of financial crisis. This information can be summarized in the chart below:



As can be seen looking at the chart above, the main share in financing of investments is from own sources, which represents approximately 70%-75% of the total net investments made annually, with a general downward trend during the analyzed period, from 77.5% in the first year of analysis to about 68% in 2009. The only source of financing which had a steady upward trend (as a percentage share in total investments) the entire period of analysis is represented by the state budget. Thus, if during the first year of analysis investments financed from the state budget accounted for only 3.4% of total investments, in the last year of analysis they have reached about 9% of total investments, representing the second most important source used by investors to finance investment projects. An interesting situation occurred when financing through loans. Thus, if in 2000 foreign loans represented approximately 12% of the total financing sources, and domestic loans only 3.5%, at the end of the period, the relation between these two forms of financing has been reversed, thus domestic loans in 2009 represented approximately 7.5% of total investments and external ones have dropped over 50% in 2009, reaching a level of about 5% of total net investment.

Another very important aspect for understanding the evolution and structure of investments in economic growth and then in recession is the foreign direct investments' analysis both as evolution and as a ratio compared to net investments. The period considered for this purpose includes the years between 2003 and 2010 and is briefly presented in the chart below.



Foreign direct investments have had an oscillating evolution throughout the period analyzed, both in volume and as a ratio towards the total net investments. The maximum level of direct foreign investments was achieved in 2008 when FDI reached approximately 35 billion lei (9.5 billion Euros), a year in which the total volume of net investments also reached the maximum level of 99.5 billion lei. The establishment of the financial crisis caused a significant decrease in the level of FDI, in 2010 reaching about 11 billion lei, which represents a decrease of approximately 70% compared to the 2008 level (35 billion lei).

Largest share of FDI in total net investment was recorded in 2004 and 2006, when FDI accounted for about 46% of the net investment volume in the national economy.

Results and Conclusions

The analysis of the evolution of investments in the national economy during the strong growth in national economy and changes occurred with the establishment of the global financial crisis and Romania's entering into a recessionary phase allows the following observations and conclusions: Firstly, the evolution of net investments in the national economy is similar to the evolution of main macroeconomic indicators during the analyzed period (unemployment rate, GDP, industrial production, trade, etc.), namely growth until 2008 and a sharp decrease in 2009 and 2010 due to the financial crisis. Therefore, net investments have suffered a strong correction in the two years of recession, materialized in the decrease of more than 50% of net investments, thus reaching the level registered in 2005.

With regard to financing sources, it appears that the only source of financing which had a significant and positive trend as a share in net investments is represented by the state budget. This is because since 2007, Romanian investors have benefited from non-reimbursable European funds accessed through various operating programs and following which, during 2007 to 2010, total funding of about 38.7 billion lei were accessed, the total value of projects funded through these funds being over 60 billion lei.

The investment category that has had one of the most extensive movements during the analyzed period is represented by foreign direct investments. In the period 2003-2008, foreign direct investments increased about five times, and during the two years of recession they have fallen by about 70% compared to the maximum level of 2008. This significant increase in FDI in the period of expansion is based on the convergence of several factors such as: cheaper labor force in our country compared with Western countries that have led some multinational companies to open offices in Romania, Romania's accession to the EU on January 1, 2007, the improvement of living standards made Romania become an attractive market for major retailers in the EU, etc. Given the close relationship between FDI and the national economic situation, we anticipate that they will resume their upward trend only when the national economy will also take an upward trend thus determining foreign investors to regain confidence in the national economy.

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THE SIX SIGMA SYSTEM IN RELATION TO THE BUSINESS' STRATEGY AND PRIORITIES

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Now more than ever, corporations the world over are scrambling to redefine the processes, techniques, and strategies they need to survive in an age of uncertainty. Businesses today seek an effective corporate performance measurement system to maximize the bottom line. With the advent of the Internet, ongoing globalization, and standardization in management systems, business leaders must focus on how to measure performance to monitor their continued viability and success. Many existing performance measurement systems were designed to support business practices and to monitor progress. With shrinking margins and competitive pressures, however, corporate performance measurement systems must do more than monitor. They must identify opportunities for optimizing profitability and growth, without pitting one against the other. The idea is to use performance measures to add value, instead of simply measuring for a formality. The Six Sigma method is not only a trendy "new solution", it is not a business whim linked to a single method or strategy – the study trying to draw attention to the fact that Six Sigma is a flexible system to improve the management and the performance of companies. The research paper seeks to demonstrate that the Six Sigma method refers to both the passion for customer service and a drive for new ideas, and to statistics and processing numbers, finding application in the fields of marketing, services, human resources, finance and sales, as well as in production and engineering.

Key words: Six Sigma method, quality, performance measurement, profitability, growth

JEL: M10, L21, O43

Introduction

In any industry, organization, or daily process, when one doesn't know what one doesn't know, it's going to cost him. For too many organizations the costs (often hidden) of defects and waste in the way they operate are huge. Having processes in which errors occasionally occur may not seem such a big deal. But when one considers how many errors may be lurking in company-wide processes, the monetary impact on the overall productivity, customer satisfaction, and profitability multiplies dramatically.

The Six Sigma approach to managing is all about helping a manager identify what he doesn't know as well as emphasizing what he should know, and taking action to reduce the errors and rework that cost him time, money, opportunities, and customers. In other words, Six Sigma translates that knowledge into opportunities for business growth.

1. What is Six Sigma?

A way to define the Six Sigma method is as a general effort for „changing organizational culture” to drive the company towards better customer satisfaction, profitability and competitiveness. The Six Sigma scale and flexibility - as a way to improve performance – is, however, best reflected by its definition as „a comprehensive and flexible system for achieving, sustaining and

maximizing business success. Six Sigma is driven only by close understanding of customer needs, disciplined use of facts, information and statistical analysis, and special attention paid to management, improvement and business process modeling ”(Pande, Neuman, Cavanagh, 2009)

Many companies believe that dealing with errors is just part of the cost of doing business. But not every manager has to accept that faulty logic. With Six Sigma, the manager can eliminate most errors, reduce the costs, and better satisfy the company’s customers.

Six sigma is a statistical concept that measures a process in terms of defects. Achieving six sigma means the processes are delivering only 3.4 defects per million opportunities (DPMO) - in other words, they are working nearly perfectly.

Sigma (the Greek letter σ) is a term used in statistics to represent standard deviation, an indicator of the degree of variation in a set of measurements or a process. In its business use, it indicates defects in the outputs of a process, and helps us to understand how far the process deviates from perfection. A sigma represents 691462.5 defects per million opportunities, which translates into a percentage of non-defective outputs of only 30.854%. That’s obviously really poor performance. If we have processes functioning at a three sigma level, this means we’re allowing 66807.2 errors per million opportunities, or delivering 93.319% non-defective outputs. That’s much better, but the company is still wasting. The Six Sigma methodology collects data on variations in outputs associated with each process, so that it can be improved and those variations reduced, being a statistical concept that measures a process in terms of defects - at the six sigma level, there are only 3.4 defects per million opportunities.

Sigma Level (Process Capability)	Defects per Million Opportunities
2	308,537
3	66,807
4	6,210
5	233
6	3.4

Figure no.1. The sigma conversion table

We can see from the conversions above that the sigma scale is exponential. It may seem like three sigma is good enough. After all, if there are 66,807 defects out of a million, that means that 933,193 things went well—93.319% perfection. The question is, how many customers can any business afford to lose? How much money can any company afford to lose because of mistakes? Why accept it as normal to be running processes at only three sigma or four sigma when, by changing the way one manages the processes, they could get a lot closer to six sigma and all the resulting benefits.

Six Sigma uncovers the layers of process variables - in data terms - that one must understand and control to eliminate defects and wasteful costs. It’s a management approach that aims to achieve the apex of quality by measuring, analyzing, improving, and controlling processes to root out defects and boost bottom-line results.

Six Sigma is about practices that help the company eliminate defects and always deliver products and services that meet customer specifications. The sigma level of a process is calculated in terms of the number of defects in ratio to the number of opportunities for defects. Six Sigma is also a philosophy of managing that focuses on eliminating defects through practices that emphasize understanding, measuring, and improving processes, money and customer satisfaction. The central idea of the Six Sigma approach is that if one can measure the defects in a process, one can systematically figure out ways to eliminate them, to approach a quality level of zero defects. So, in short, Six Sigma is several things:

- A statistical basis of measurement;
- 3.4 defects per million opportunities;
- A philosophy and a goal: as perfect as practically possible;
- A methodology;
- A symbol of quality

2. TQM to Six Sigma

Many people associate Six Sigma with the quality movement. How does Six Sigma differ from the “quality” programs the company may have already experienced? No understanding of the quality movement would be complete without mentioning the visionary W. Edwards Deming, best known for helping the Japanese revitalize their industries after World War II. His approach was radically new and had significant impact on the evolution of quality and continuous improvement programs in organizations around the world. It is fair to say that Deming’s management approach, which came to be known as Total Quality Management or TQM (though Deming didn’t like that term), has changed the way thousands of companies conduct their operations. Total Quality Management (TQM) approach focused on the organization as a system, with an emphasis on teams, processes, statistics, continuous improvement, and delivering products and services that meet and exceed customer expectations. Six Sigma is a disciplined extension of TQM.

By the mid-1980s, the extent to which corporate management was focusing on quality was significant; businesses adopting TQM underwent a major paradigm shift, a transformation of “unlearning” everything previously believed about business to create better products and services.

They began to understand that quality did not require higher costs but more efficient and reliable processes that delivered defect-free outputs and that they had to focus on process improvement and customer satisfaction. TQM is an excellent foundation from which to build toward the next level of quality management, represented by the Six Sigma approach.

But Six Sigma is far more than the latest “quality” trend. The proof? Companies that have implemented Six Sigma have achieved outstanding financial results and developed a disciplined, pragmatic plan for improved financial performance and growth. Companies such as Motorola, Texas Instruments, IBM, Allied Signal, and General Electric have successfully implemented Six Sigma and reduced costs literally by billions of dollars. More recently Ford, DuPont, Dow Chemical, Microsoft, and American Express have started working on instituting the Six Sigma methodology. But it’s about more than money.

Jack Welch, the CEO who started Six Sigma at General Electric, called it “the most important initiative GE has ever undertaken,” and said that Six Sigma is “part of the genetic code of our future leadership.” Six Sigma was also conceptualized as a quality goal in the mid 1980s at Motorola because technology was becoming so complex that traditional ideas about acceptable quality levels were inadequate. As the number of opportunities for defects increases, the percentage of perfection must rise; so, in 1989 Motorola announced a five-year goal—a defect rate of not more than 3.4 parts per million - six sigma. This initiative challenged ideas of quality in the U.S. and changed the concept of quality levels. It was quickly no longer sufficient to measure quality as percentages (defects per hundred opportunities). Now the bar was raised, to measure defects per million or even per billion.

„Six Sigma” is everything but a simple concept, Six Sigma is a system that encompasses many concepts, tools and principles. The examples derived from the experience of several successful companies that have implemented the Six Sigma method reflects several benefits which attract companies towards implementing this method: it generates lasting success, provides a

performance target for each, added value for customers, accelerates the rate of improvement, promotes cross-sector learning and exchange of experience, and implements strategic change.

3.The Six Sigma Methodology – the DMAIC approach

The Six Sigma methodology uses statistical tools to identify the vital few factors, the factors that matter most for improving the quality of processes and generating bottom-line results. Six Sigma statistical tools work like magic to uncover what one doesn't know. Yet no one has to be a statistician to use them: you focus on selecting tools, using them, and analyzing data and let the specific software do the calculations.

The five-phase process of DMAIC uses a collection of tools and is a logic filter which leads to the vital few factors affecting the outcomes of the process:

Define - Determines the project goals and deliverables to customers (internal and external).

Measure - Identifies one or more product or service characteristics, maps the process, evaluates measurement systems, and estimates baseline capability.

Analyze - Evaluates and reduces the variables with graphical analysis and hypothesis testing and identifies the vital few factors for process improvement.

Improve - Discovers variable relationships among the vital few, establishes operating tolerances, and validates measurements.

Control - Determines the ability to control the vital few factors and implements process control systems.

In other words, the Define phase sets the targets for the Six Sigma project, the Measure and Analyze phases characterize the process, and the Improve and Control phases optimize the process and then maintain it.

Process variation exists in every transaction, department, and business unit. From the micro to the macro perspective, using Six Sigma methods allows you to define goals and set specifications, measure process characteristics and estimate baseline capability, analyze the variables and identify the vital few factors, improve the process, and control the vital few factors and implement process control systems.

Using the DMAIC approach, one can dig out waste and return hidden dollars to the company's bottom line.

We should note that Six Sigma methodology is not rigid. Approaches vary, sometimes significantly. One of the variations is in the phases: some approaches use all five of the phases listed above, while others do not include the Define phase.

Six Sigma professionals recognize that this approach is a kind of roadmap for improvement, and it doesn't matter if it's called DMAIC, MAIC, PCOR (from the Air Academy - prioritize, characterize, optimize, and realize), GETS (from GE Transportation Systems - gather, evaluate, transform, and sustain).

The point is that this is a set of tools aimed at helping managers and employees understand and improve critical processes.

Six Sigma is based on a few key concepts: Defect; Variation; Critical-to-quality; Process capability; Design for Six Sigma. Six Sigma focuses on defects and variations. It begins by identifying the critical-to-quality (CTQ) elements of a process— the attributes most important to the customer. It analyzes the capability of the process and aims at stabilizing it by reducing or eliminating variations.

Vital few factors are those that directly explain the cause-and-effect relationship of the process output being measured in relation to the inputs that drive the process. Typically, data shows that there are six or fewer factors for any process that most affect the quality of outputs in any process, even if there are hundreds of steps in which a defect could occur - the vital few. When

one isolates these factors, it becomes clear what basic adjustments are needed to be made to most effectively and reliably improve the outputs of the process.

Simply put, Six Sigma management is about tying quality improvement directly to financial results. The Six Sigma goal is to link internal processes and systems management to end consumer requirements. Six Sigma is a scientific approach to management, driven entirely by data. The Six Sigma methodology eliminates the use of opinion - "I think," "I feel," or "I believe." Six Sigma drives the organization to a more scientific means of decision making by basing everything on measurable data.

4.Focus on Engaging People and Changing Processes

Another thing to know about Six Sigma is that it doesn't rely on the latest program fads or "magic pills" to fix organizations. It relies on old-fashioned hard work coupled with factual data and a disciplined problem-solving approach. It affects every aspect and level of an organization - from line workers to middle managers to CEOs - to transform the company's people and its processes.

The question is "What can the process deliver?" Process capability can be seen as a statistical measure of inherent variation for a given event in a stable process. It's usually defined as the process width (normal variation) divided by six sigma and quantified using capability index (Cp). More generally, it's the ability of the process to achieve certain results, based on performance testing.

As the first step in that transformation, the Six Sigma mindset considers the company and its people as assets, rather than as costs (liabilities); they are as much an asset as any piece of capital equipment, and they represent an investment with extraordinary potential for return.

Shifting the perspective on people from liabilities to assets (or investments) is fundamental to Six Sigma. Once thinking in terms of "human assets," it's equally important to realize the underlying monetary value of rooting out wasted materials and steps in processes, as this is critical to unlocking the hidden return on the company's investment in people. And that's also another aspect of the Six Sigma approach to managing. The fact is that work gets done through processes executed by people; both successes and problems are usually the result of what lots of people do, not just one person. If one doesn't pay careful attention to both people and processes, improvement will not happen.

An easy way to understand the concept of human assets is to calculate their individual return on investment (ROI). For example, if an employee costs the business 50,000 a year and his / her activity produces revenue of 100,000, the employee has covered the costs and raised an additional 100% - the profit or return. So, the annual ROI for that employee is 100%. By calculating employee ROI, one can focus on making the most of them as assets invested in the business. By changing the way we look at processes, by understanding the vital few factors that cause waste, error, and rework, we can improve the ability of our processes to deliver higher quality to our customers and to lower costs. Once we know which vital few factors to focus on, we can make improvements that deliver dramatic results.

And by putting employees to work at solving process problems with proven statistical tools, the manager can eliminate not only errors, but also inaccurate speculation about why processes don't work. Again, instead of opinion, the manager arms himself and his people with quantifiable information - based on facts, not hunches and guesswork. When he knows the facts, he is in a position to fix the problems permanently and gain long-term benefits. In other words, he has leveraged the power of knowledge to transform performance.

5. Conclusions

Six Sigma at many organizations simply means a measure of quality that strives for near perfection. Six Sigma is a disciplined, data-driven approach and methodology for eliminating defects (driving toward six standard deviations between the mean and the nearest specification limit) in any process - from manufacturing to transactional and from product to service.

Yet, Six Sigma is not another quality program. Businesses exist for one purpose - to profitably serve customers. So it follows that any problem-solving initiative should do the same. Six Sigma uses the company's resources to fix identifiable, chronic problems. It proves its value by connecting outcomes to the company's bottom line. Quality programs lay a valuable foundation in creating a quality mindset. Six Sigma is not theory. It's a practice of discovering the vital few processes that matter most. It defines, measures, analyzes, improves, and controls them to tie quality improvement directly to bottom-line results. Six Sigma is an active, involved effort that puts practical tools to work to root defects at all levels of the organization.

It is also no theoretical exercise. Since the success of Six Sigma is directly linked to monetary outcomes, it generates real-world results. It uses the most readily available resources in an organization - its human assets. That means that positive, tangible results consistently show up wherever and whenever people are engaged in implementing the method.

Six Sigma is not a training program. Of course, practitioners are trained in the methodology to ensure correct implementations and results. But Six Sigma is a business strategy that fosters a cultural shift at all levels. Permeating departments, functional groups, and all levels of management, Six Sigma changes the outlook and practices of everyone in the organization. From workers on assembly lines and bookkeepers in accounting to operations managers and human resource personnel, training exists only to instill the method, facilitate transformation, and get financial results by attacking chronic defects with proven statistical tools.

Six Sigma actively links people, processes, and outcomes in a rigorous, adaptable way to get you the results you're looking for. No matter the industry, business, product, or service, as you apply Six Sigma, you'll see the tangible results on your projects.

Six Sigma helps the company and the manager to identify what they don't know, indicates what they should know, and helps them reduce defects that cost time, money, opportunities, and customers.

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THE ROLE OF THE SUSTAINABILITY REPORT IN CAPITALISTIC FIRM

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The aim and the central topic of this research is the understanding of the importance of Sustainable growth strategy approach as a driver to achieving top-line growth and bottom-line results.

The main contributions of this line of research are to demonstrate the idea that the sustainability report is an instrument for social interaction and social cost/benefit analysis and to show that such an instrument can describe, comment on and sum up the firm's own behaviour aimed at sustainable growth.

The work integrates the CSR management literature with a large body of research in accounting and finance.

This study draws from theoretical research about the nature of the corporation, its role in society and contributions by recent research on corporate social, environmental, ethical responsibility and accountability.

Our research demonstrates that the economic existence of the capitalistic firm as a producer of economic and financial values must be appreciated, in terms of the sustainability of the development path of the firm, and evaluated by a wide range of social performance measures of outcome or benefit.

It also shows how the Sustainability report emphasizes the link between firm and territory, and affirms the concept of the firm as an entity that, by pursuing its own prevailing interests, contributes to improving the quality of life of the members of the society in which it operates.

This paper contributes primarily to the academic debate by reviewing past attempts to theorise CSR and stakeholder dialogue, identifying gaps and weaknesses, and proposing the Sustainable Growth implementation processes for the creation of value. It also highlights the relationship between CSR activity and corporate image and performance.

The research shed light on aspects of CSR activity for which little is known and much less is being understood; namely, the channels and the mechanisms through which the CSR impact is perceived and realized for creation of value.

Carlotta Meo Colombo (3) considers the capitalistic firm as Business Value-Creating Organizations and Patrizia Gazzola (1-2;4-6) considers the Sustainable Growth implementation processes for the creation of value.

Keywords: Sustainable Growth, Creation of Value, Sustainability Report, Performance, Stakeholders.

JEL codes: M14, M41

1. Introduction

Strictly speaking, firms are traditionally considered as systems for the creation of economic and financial value for their shareholders, and their performance – profit and the value of capital – is measured by a coherent system of monetary values.

Nevertheless, if we do not limit our view to simply the shareholders but consider instead a vast group of stakeholders, we must then also broaden our notion of the production of sustainable value in order to include both the social value and the environmental value.

In effect, the firm sets a system of objectives for itself which is centered on its sustainable growth, but, at the same time, develops a strategy for achieving a multi-dimensional growth that encompasses the economic, social and environmental dimensions.

This implies intense social managerial actions based on transparency, growth of reputation, dialogue with the stakeholders, continuous research and development in all sectors and processes; these actions require effective communication instruments, primarily in the economic crisis (Iamandi, Constantin and Jodes 2010: 963-969)

In this sense the sustainability report, as far as it certifies the ethical profile of the firm and legitimizes the latter's social and environmental role, emphasizes the link between firm and territory, and affirms the concept of the firm as an entity that, by pursuing its own prevailing interests, contributes to improving the quality of life of the members of the society in which it operates and that can, in all respects, represent a means for the creation of sustainable value.

2. The overall fitness of the capitalistic firm as a system that produces “value”

Despite the differing perspectives from which the firm can be viewed, we believe it is appropriate to accept the basic thesis that considers the capitalistic firm, or *Business Value-Creating Organizations* (BVCO), as an autopoietic production, business and profit-oriented organization (Mella 2007: 413- 421, 2009), whose fitness resides in its capability – or efficiency (**Beer 1981**) – to produce adequate levels of economic and financial values through a network of specialized organs and processes (Alter and Hage 1993).

We propose the following basic Hypothesis:

- a. a condition for the creation and survival of a *capitalistic firm* is that the entrepreneur succeed in developing a portfolio of businesses with sufficient return to acquire and maintain invested the capital necessary to activate and continually renew the productive and economic processes and the investment cycles;
- b. the overall fitness of the firm, which guarantees its autopoiesis, is revealed by *financial measures of performance* that denote the efficiency and effectiveness in the production of shareholder value in terms of return and capital gains;
- c. the overall fitness includes the *productive* and *economic* fitness, indicated by a system of performance measures that denote the economic and productive efficiency revealed in the production of *economic values*;
- d. the autopoiesis of the firm, when viewed as an economic social actor, depends on its capacity to earn the appreciation of the stakeholders who are not components of the organization but who gain external advantages, individual or social, from its existence (Toffler 1985).

As a social unit, the firm must produce social shared “value” (Harrison and St. John 1998) in the broader sense that its economic existence as a producer of economic and financial values must be appreciated, in terms of the *sustainability* of the development path of the firm, and evaluated by a wide range of social performance measures of *outcome* or *benefit*: the efficiency of materials; technical innovation; energy efficiency; community relations; eco design; product recyclability; and employee relations.

The attainment of perceived levels of social performance produces reputation, brand and confidence, so that the environment itself sets the conditions for the firm's legitimation and

consent, which favours autopoiesis and thus a lasting existence for the enterprise as a social unit as well as an organizational type (Gazzola and Pellicelli 2009).

This implies, on the one hand, the organizational ability to recognize the set of relevant stakeholders as well as to identify their expectations and, on the other, the capability to communicate the global “value” produced in terms of social benefits and prevented damage to the physical environment.

3. Performance measures for Capitalistic Firms as systems that produce “values”

There are quite a number of financial performance indicators; however, we feel that only a limited number are sufficient to express the fitness of the capitalistic firm as a system for producing values, according to the basic thesis at the end of the preceding section (Mella 2005: 25-52).

The most concise performance indicator is the return on equity, *roe*, defined as the ratio between the net income R and the equity E during a period T: $roe = \frac{R}{E}$.

This indicator is particularly significant in that it expresses, in extremely concise form, the capacity of the firm to satisfactorily remunerate those who have invested equity in it, guaranteeing a return that is sufficient to maintain the capital’s integrity, both in monetary terms (preserving its purchasing power), financial terms (financial return, interest, dividend and capital gains at least equal to that obtainable from investments with similar risk conditions), and real terms (capacity to renew investments at the end of their cycle) (Ruefli, Collins and Lacugna 1999: 167-194).

If *roe* is a relevant measure of performance for shareholders, the most important performance indicator for the *financial transformation* is the return on investment, *roi*, which is the ratio between the operating result, OR, and the invested capital, IC, over a period of time T: $roi = \frac{OR}{IC}$.

It is important to observe that *roe* depends directly on *roi* by means of the well-known general law of returns (Modigliani and Miller 1958: 261–297):

$$roe = [roi + (spread\ der)], \text{ where } spread = roi - rod, \text{ and } der = \frac{D}{E}$$

This previous Modigliani-Miller relation clarifies how the firm’s general *financial* performance, indicated by *roe*, is a function both of *economic efficiency*, expressed by *roi*, and the capacity of the firm to acquire a financial structure, expressed by *der*, that permits it to take advantage of the *financial leverage* effect in the presence of a differential in returns indicated by the *spread*.

From *roe* and *roi*, we can derive other concise indicators of financial fitness that refer to the firm’s ability to meet the expectations of investors: the *economic value added* (EVA), the *dividend on equity* (*doe*) and the *economic value of the firm* (EVF).

EVA can be defined through the following equation:

$$EVA = IC (roi - coi),$$

in which *cost of invested capital* (*coi*) – or also *capital cost rate* (*ccr*) or *weighted average capital cost* (*wacc*) – represents the *cost of investment* and is determined by the following expression:

$$coi = \frac{rod\ D + roe^* E}{IC} = rod \frac{D}{IC} + roe^* \frac{E}{IC} = wacc$$

Thus, while *roi* is the *return on investment*, *wacc* represents the part of this return that is needed to pay the interest on the Debt, at an average cost equal to *rod*, as well as to guarantee the shareholders a proper return equal to their opportunity cost, *roe**.

The spread ($roi - coi$) thus takes on the meaning of *overall financial performance* (which is independent of the scale of the investment), whose absolute value is instead represented by the EVA, taking into account the amount of IC (Stern and Hutchinson, 2004).

In general shareholders, being holders of pure investment equity, compare their satisfaction not so much on the basis of the indications from *roe* as on

$$d_{oe} = \frac{R}{E} d = \frac{DIV}{E},$$

where d is the average dividend rate that would guarantee a self-financing adequate for the firm's growth.

The EVF is defined as the level of capital capable of producing a net result equal to that effectively achieved by the firm as a financial transformer, R , under the assumption that this capital was invested with a satisfactory return equal to roe° , which is considered acceptable to shareholders.

Since by definition $EVF * roe^\circ = R$, and $R = roe E$, with roe equal to the effective financial return, through substitution we obtain:

$$EVF = \frac{roe}{roe^\circ} E.$$

From the preceding performance indicators it follows that the fitness of the firm is linked to its capacity to produce:

a roe which is not below the minimum or fair roe^* necessary to satisfy shareholders, thereby creating value;

a $roi > roi^* = coi$. If this *second condition* is met, then $EVF > E$, thereby achieving the financial integrity of the equity capital invested by the shareholders.

This shows the relevance of human capital and intangible assets in capitalist production and the need for:

- *creativity*, by which products and processes are continually innovated (Christensen 1997; Deephouse 1999), thereby favoring applied scientific research and technological innovation (Von Hippel 1995);
- *intelligence* in understanding internal and external processes, in order to rationalize the technical processes of production;
- *organizational learning* and the formation of learning organizations to the competitive challenges through new work rules (Schmitz Jr 2001)
- *management control* (from the Decision Support System to Just-In-Time) (Wilcox and al.);
- *a good reputation* for the firm in its environment (Carter and Manaster 1990: 1045-1067).

According to the concept of sustainability – originally introduced in the 1987 Brundtland report, *Our Common Future*, which was commissioned for the United Nations – whose central principle is “*development which meets the needs of the present without compromising the ability of future generations to meet their own needs*” (WCED 1987), we propose the following Hypothesis: the capitalist firm, as a social unit, must produce social shared “value” (Harrison and St. John 1998), understood in the broader sense that its economic existence as a producer of economic and financial values must be appreciated, in terms of the *sustainability* of the development path of the firm, and evaluated by a wide range of social performance measures of *outcome* or *benefit*: the efficiency of materials, technical innovation, energy efficiency, community relations, eco design, product recyclability, and employee relations.

4. From the corporate balance to the sustainability report

The system of values achieved by the corporation as a system of economic transformation is reflected in the corporate balance which translates the values produced into performance indicators in order to assess whether or not the economic-financial objectives of the business and profit organization have been achieved.

Due to the fact that the system of economic and financial values in the balance derive only from monetary exchanges and reflect only the conditions of productive, economic and financial efficiency, the balance that contains such values has three limits with regard to the information it conveys.

In the first place, it is not able to express the conditions for long-term success that derive from the non-monetary ties to the social environment.

Secondly, the traditional corporate balance cannot account for the ethical values and other intangibles which are fundamental to the success of the enterprise in creating economic values.

Thirdly, the statement of produced values does not provide sufficient indications of the ability of the firm to expand in a way compatible with the environmental resources and the social values.

In order to evaluate the overall impact of the firm's activity on the collectivity (Hill and Jones 1992) it is necessary to come up with a document that supplements the traditional corporate balance, which is called the sustainability report, since its objective is to indicate the value created by investments in the social field and, more generally, the results of the firm's social and environmental policy.

Thus, the sustainability report represents the means by which the firm describes, comments on and reports its role and behaviour with regard to sustainable growth, and through which the firm's social actions toward its stakeholders is made visible and transparent.

The sustainability report, providing information on corporate policy with regard to the Corporate Social Responsibility (CSR) (Blowfield and Murray 2008), promoting an image that gains the consensus of the collectivity and enhances the reputation of the firm, and ensuring greater trust by the stakeholders (Zadek 2001), thus shifts attention from the creation of *economic and financial values* by the productive organization to the creation of *social and environmental values* by the organization as a social agent.

It is for this reason that the sustainability report is the fundamental instrument to ensure the public's appreciation for the social activities of the firm (Griffin 2008), enhancing its reputation in order to create the value of the firm as an actor in the social context as well as to engender trust, which in turn represents the basis for improving the firm's economic and financial transactions and, as a result, making the production of values more efficient. (Kerr, Richard and Chip 2009).

In order to enhance its reputation (Figge and Schaltegger 2000) and trust, which are the fundamental elements for the production of value by the firm, it is thus important for the firm to be able to demonstrate, by means of the sustainability report, the extent and limits of its own CSR.

From this perspective a comprehensive relational process and a continuing dialogue with the social agents become essential elements for creating a relationship of trust with the stakeholders and a context of shared values.

The sharing and pursuit of objectives by means of the trust that is generated through the development of long-lasting relations leads to the spread of a culture (Kotter and Heskett 1992) of shared responsibility. This culture is the condition for the organization's success as well as a source of long-term competitive advantage, which are useful and effective elements for the creation of value in the organization (Mankelov 2006).

5. Sustainable growth and the “Triple Bottom Line”

The firm, as a social agent, must base its growth on ethical behaviour (Dyrud 2007: 36-44) which involves safeguarding as much as possible the environmental conditions that will be “passed on” to the future generations. Thus the firm must compete on the social and environmental (Freedman and Jaggi 2009) front as well as the economic-financial one.

In fact, in developing its strategies the firm must take into account the concept of *sustainable growth*, which defines the ability of the present generation to achieve a type of growth that, while satisfying the needs of the present, does not compromise the ability of future generations to satisfy to their own needs.

Sustainable growth represents a necessary condition to obtain medium- to long-term success (Clarkson 1995), managing its businesses so as to improve its economic results (Heal 2008) but at, the same time, safeguarding the natural environment and promoting social justice.

The corporate balance - as clearly shown in the “*Sustainability Reporting Guidelines*” in the “*Global Reporting Initiative*” (www.globalreportinginitiative.org) - cannot by its own nature identify and point out the many ways in which firms influence the environmental and social ecosystems they operate in, beginning with the use of human, natural and capital resources and the creation of value.

The European Commission has asked all the large firms listed in the Triple Bottom Line Reporting (Elkington and Fennell 1998) to communicate their economic, social and environmental performance to the shareholders, supplementing the economic aspect of their management with the social and environmental ones, to the benefit of the relationship with its stakeholders and the markets.

Economic prosperity, environmental quality and social justice are the pillars on which the creation of corporate value is based, according to the “triple bottom line” (Warren 1999).

6. Conclusion: The communication of the social and environmental commitment to create value

The creation of social value for the firm is necessary to maintain an effective process for the creation of economic and financial values (Siregar and Bachtiar 2010: 241 – 252).

The sustainability report represents the instrument for monitoring, financial accounts preparation and communication regarding the responsible management approach to achieve a sustainable growth that respects the shared values of the context in which the firm operates.

In order to measure social (Kaplan and Norton 1992) performance (Clarkson 1995) it is necessary to insert indicators (EEA 2001) into the sustainability report that allow the stakeholders to measure the firm’s capacity to create well-being for the collectivity (Zakhem, Parker and Stoll 2007) and to demonstrate the firm’s social utility by indicating, from both an internal and external point of view, its capacity to achieve social and environmental objectives.

A firm that focusses not only on the quality of the product but also on the safety of its employees, the social impact of its activities and the use of ethically-correct procedures is creating value (Zadek, Pruzan and Evans 1997) by gaining the trust of its workers, the market and its collectivity of reference.

In conclusion, the sustainability report can be viewed as a means for giving value to the firm, since it permits the firm to monitor and prepare the financial accounts for the process of responsible management between the firm and its interlocutors in order to increase its economic advantage and at the same time its social legitimization.

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CODES AND PRACTICES OF IMPLEMENTATION OF CORPORATE GOVERNANCE IN ROMANIA AND RESULTS REPORTING

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Corporate governance refers to the manner in which companies are directed and controlled. Business management was always guided by certain principles, but the current meaning of corporate governance concerns and the contribution that companies must have the overall development of modern society. Romania used quite late in adopting a code of good practice in corporate governance, being driven, in particular, the privatization process, but also the transfer of control and surveillance of political organizations by the Board of Directors (BD). Adoption of codes of corporate governance is necessary to harmonize internal business requirements of a functioning market economy. In addition, the CEE countries, the European Commission adopted an action plan announcing measures to modernize company law and enhance corporate governance. Romania takes steps in this direction by amending the Company Law, and other regulations, although the practice does not necessarily keep pace with the requirements. This study aims on the one hand, an analysis of the evolution of corporate governance codes adopted in Romania, but also an empirical research of the implementation of corporate governance principles of a representative sample of companies listed on the Bucharest Stock Exchange (BSE). Consider relevant research methodology, because the issuer of the Codes of CG in Romania is BSE listed companies requesting their voluntary implementation. Implementation results are summarized and interpreted at the expense of public reports of the companies studied. Most studies undertaken in this direction have been made on multinational companies which respects the rule of corporate governance codes of countries of origin. In addition, many studies also emphasize the fair treatment of stakeholders rather than on models of governance adopted (monist/dualist) with implications for optimizing economic objectives but also social. Undertaken research attempts to highlight on the one hand, a misapplication of the principles of corporate governance in Romania at present, but also a lack of transparency in the dissemination and publication of information. They should promote a Board of Directors determined and would allow stakeholders access to information about the company. Research results can provide a basis for reconsidering the CG policies in Romania.

Keywords: Corporate Governance, Governance Code, Corporate Governance Principles, Annual Report, Governance models

JEL: G34, M14, M48, N40

In Europe, the first corporate governance code was issued in 1992 Cadbury Code (Sir Adrian Cadbury was Chairman of the Board of Cadbury Company for 14 years). This was the basis for the Code of Corporate Governance and the London Stock Exchange has held *three basic principles of corporate governance* (Cadbury 1992: 16), namely: *transparency, integrity and responsibility*. Later, as a result of financial scandals that have destabilized the operation of the British system, to reconsider the importance of corporate governance; quality of implementation of recommendations contained in the Cadbury Code was discussed in a series of progress reports issued in the coming years.

In the EEC, information on "Corporate Governance in Europe" published in June 1995. Changes and improvements to the Codes of CG occur throughout this period so that in March 2010 adopted the Code „*ecoDa Corporate Governance Guidance and Principles for Unlisted Companies in Europe*” issued „*The European Confederation of Directors' Associations (ecoDa)*” (ECGI). This Code of CG includes a set of 14 principles that focus specifically on the protection of minority shareholders in the face of possible abuses by controlling shareholders. CG system in Europe is considered an insider system (Clark 2007: 10), characterized by the presence of active shareholders within the corporation and is in direct business relationship with the entity. Therefore, concentrated ownership is associated with the control, mission management stakeholders seeking interest groups, to increase added value for them. In addition, business strategy proclaims active involvement in the long term, the stakeholders.

In **Romania**, the need to implement the rules of CG was determined by the privatization process which required companies to improve management practices, on the one hand, and the transfer of control and surveillance of political organizations by the BD, on the other hand. With the advent of the first law of privatization (in 1991) empowered the State Council was replaced by Annual General Meeting (AGM) and was established and BD. CG implementation rules was a way to harmonize internal business requirements of a functioning market economy.

Codes of Corporate Governance in Romania

The first Code of CG in Romania was issued in June 2000 by the International Center for Entrepreneurial Studies and was the target of public companies listed on BSE. Code rules have not been so well received by the market on the ground that they had particular regard to the protection of minority shareholders. Subsequently, in 2008 issued the Code of Corporate Governance of BSE, which comprises 19 principles, namely:

- I: Companies will adopt *clear and transparent structure* of corporate governance that will adequately disclose the general public;
- II: Companies are obliged to respect *the rights of shareholders* and ensure their fair treatment;
- III: Companies will make every effort to achieve *an effective and active communication* with shareholders;
- IV: Companies are driven by a BD that *meets regularly* and makes decisions that allow them to fulfill their duties of an effective and efficient manner;
- V: BD is *a company responsible for its management and functions as a collective body*, based on an accurate and complete information;
- VI: The structure of a company's BD will ensure *a balance between executive and non executive members*, so no one person or group of people can not dominate, in general, the CA decision;
- VII: A sufficient number of BD members will be *independent directors*, meaning that they have or recently had, directly or indirectly, any business relationship with the issuer or persons involved, of such importance as to influence their objectivity views;
- VIII: BD has a membership that ensures its ability to *monitor effectiveness, analyze and evaluate the work of directors* as well as fair treatment of shareholders;
- IX: Election of Board members will be in a formal, rigorous and transparent;
- X: BD will assess whether it is possible composition of a Nominating Committee consisting of its members and composed mainly of *independent directors*;
- XI: Companies will provide the services of managers and executives with *a good professional and ethical profile* of a reliable remuneration policy, consistent with the strategy and long-term interests of these companies;
- XII: Corporate governance structures in place to ensure that *an adequate and continuous periodic reports on all important events on the company*, including financial situation, performance, ownership and direction;

- XIII: BD will adopt strict rules to protect society's interests in the areas of financial reporting, internal control and risk management;
- XIV: BD will take appropriate operational solutions to facilitate proper identification and resolution of situations in which a director has a material interest *in its own name or on behalf of third parties*;
- XV: BD of members will make decisions in the interests of the company and will not take part in debates and decisions that create *a conflict between their personal interests and those of society or of a subsidiary company controlled*;
- XVI: BD will determine, after consultation with the structures of internal control, approval and implementation procedures for transactions with the Company or *its subsidiaries parties*;
- XVII: Administrators and managers will maintain the *confidentiality* of documents and information received during their term;
- XVIII: Corporate governance structures must know and recognize *the legal rights of interested third parties* - stakeholders - and to encourage cooperation between this company and to create prosperity, jobs and businesses to ensure sustainability of financially sound;
- XIX: Where to adopt *a dualist management system*, the previous principles are properly applied, adjusting the dual system of uniform provisions in full conformity with the objectives of good corporate governance, information transparency and investor protection and market.

The situation presented, it appears that the 19 principles 14 principles aimed, directly, BD, powers and functions, with emphasis on the independence of non-executive managers. This situation is surely The World Bank made recommendations for our country as a result of a study undertaken for the period 2001-2006 in 17 countries in transition (McGee 2008: 22-51). The study focused on changes in practices CG, is analyzed how to comply with its principles. The results of the analysis revealed that Romania was ranked five, along with Bulgaria and Slovakia in terms of CG principles.

In these circumstances, the World Bank recommendations across Romania have followed two major directions:

- need to increase the role of BD and the need for the introduction of specialist committees to advise the board;
- meetings of the AGM of listed companies to take part and have their external auditors provide explanations on how shareholders have met the obligations set out in the investment contracts.

Based on these recommendations, but also fund measures to modernize company law and enhance corporate governance in CEE, announced by Directive 2006/46/EC (Directive 2006/46/EC), national legislation is amended in line with requirements EU to improve disclosure on corporate governance practices applied in companies. Short-term priorities of Community action in this area have included targeting: confirm *the collective responsibility of directors and improving information on applied corporate governance practices in companies*. According to the plan of action, members of the administrative, management and supervision of a company must act within *the powers* conferred upon them by law. Also, companies whose securities are admitted to trading on a regulated market and which have their registered office in the Community are required to submit *an Annual Statement on the CG* when the company applies the corporate governance provisions other than those set by national whether these provisions are set directly into a corporate governance code under which the company or any corporate governance code which the company may decide to apply.

For the system of corporate governance adopted to contribute to improving the company's value creation potential, it is not sufficient to cover only the concern of *legal and financial dimension* CG (separation property or function of the management), it is important *managerial dimension* of

value creation is an effect of applying *a set of skills* in a context based on discipline and accountability.

In this regard, the Companies Law no. 31/1990 made some changes, of which the most important concerns about the GC:

- By constitutive act or decision of the AGM may provide that one or more members of the BD *must be independent*;
- GM may decide to create *independent advisory committees* charged with conducting investigations and making recommendations for the board, in areas such as audit, remuneration of directors, managers, auditors and personnel management functions, committees will submit to the board regularly Reports on their activities;
- at least one member of each committee created to be *independent non-executive directors*; *audit committee and remuneration* shall consist only of *non-executive directors*;
- constitutive act may stipulate that companies stock is managed by a *Directorate (Managing Board) and a Supervisory Board* (the dual system of administration); Managing Board exercises its functions under the control of the Supervisory Board; Supervisory Board members *can not be simultaneously members of the Directorate and can not aggregate membership of the supervisory board of the company's employee*.

We note that the law requires companies are joint stock companies to create *advisory committees be independent*, or to use the dual system of administration, implicitly assumes an independent board, that the Supervisory Board.

In line with good governance practices reconsideration has been changed and the basic rules which guide companies currently in Romania, namely with the adoption OMPF 3055/2009 included is a new section (Section 11) for *internal control*, believed, moreover, *a pillar of corporate governance*. In that legislation insisting on *internal control purposes*, namely to ensure consistency of objectives, identifying key success factors to the entity's management and communication, real-time information on performance and future prospects. Whatever the nature or size of the entity, efforts to implement sufficient internal controls related to the application of *good practices*. In addition, a new statement included in national legislation provides that a separate section of the management report will present information on *corporate governance*. Aunt companies whose securities are admitted to trading on a regulated market will include information on the CG section to a statement will refer to: *corporate governance code that applies to the entity or who voluntarily decided to apply; since, according to national law, the entity is removed from the code of corporate governance that apply or who chose to apply; an explanation of it on the parts of code that do not apply and the reasons for not applying*.

BSE's Corporate Governance requirements. Case Study

Therefore, in accordance with the Code of the CG BSE in 2008, companies whose financial instruments are traded on a regulated market operated by the BSE will adopt and comply with a *voluntary basis*, the Code of Corporate Governance issued by BSE. In this sense, "issuers" are required to enclose the Annual Report, starting with the year 2009, "*Corporate Governance Compliance Statement*" – "*Comply or Explain Statement*" (CES). This statement is designed based on the 19 principles included in the BSE Code of Governance which in turn are developed 38 recommendations, according to the Corporate Governance Code Guidelines prepared by the Institute of CG of BSE, which provides suggestions implemented according to best practice internationally.

"*Comply or Explain Statement*" even start with the last principle stated in the Code of CG, namely: "*The issuer is administered under a dual system?*" Therefore, we believe that as accounting, is considered the going concern basis on which other principles are based, as in the

GC, if that principle in mind, a lot of other principles and recommendations should be easier to comply. Further, the “*Comply or Explain Statement*” required by BSE calls for issuers to develop a CG Regulations to be posted on their websites CG defining structures, functions, powers and responsibilities and leadership BD executive. In addition, the annual report should contain a separate section for CG to be described all the relevant events related to the CG, recorded during the previous financial year. Also require issuers to post on the BSE website updated memorandum, indicating the list of board members are independent members, members of executive management and the specialized committees and CV for each member of the BD and the executive management. Recommendation No. 8 “*Comply or Explain Statement*” requires that every issuer to disseminate in a section on its website on shareholder rights and the rules and procedures for participation in the AGM.

The main “concern” of CES balance between executives and aimed at non-executive (independent), so that no person or group of people can not dominate the decision making process of BD. It also recommended that the activity was BSE, BD to have the support of independent advisory committees to examine specific topics and advice on these topics BD (it is the Audit Committee, Remuneration Committee and Nomination Committee). CES concludes with the question: “*Issuer activities on social and environmental responsibility of the company?*” We see therefore that the emphasis is increasingly more on corporate social responsibility, both by government to assist all stakeholders, but also by a positive attitude towards society and environment in general. Romania’s attitude and, in particular, the Exchange regarding the requirements of increasingly stringent on the CG follows, of course, bringing the European and international practices in this area.

To demonstrate that the adoption of codes and practices are the results of CG in Romania, we conducted a study of companies listed on BSE in category I and II (total of 65 companies).

Among *the most important findings*, we report:

- only three of the analyzed companies are managed under *a dual system of administration* (Carpatica SA, OMV Petrom SA, Prodplast SA);

- six companies have published “*The Comply or Explain Statement*” for the year ended December 31, 2010 (Azomureş SA, BRD GSG SA, Ropharma SA, Aerostar SA, Altur SA);

- 23 of the 65 companies analyzed, *the offices of president and general manager of BD* are owned by the same person;

- 21 companies make *no claim related to the CG*, just over 15 companies information to shareholders, while other companies (CEMACON SA, Comp SA, Farmaceutica Remedia SA, TMK Artrom SA, Terplast SA) presents only the information contained the opposite association GC Code requirements;

- 8 companies *have adopted codes of their CG* and post CG information in a separate section on their websites (Alro SA, Antibiotice SA, Azomureş SA, Transelectrica SA, Ropharma SA, Transgaz SA, Altur SA, Carpatica SA).

Reported findings from the study conducted lead us to conclude that *the principle of transparency* in our country - entered the first principle of CG Code: Cadbury Code - still more to the statement included in state codes CG. Consequently, the analysis that the other two basic principles of GC - *integrity and responsibility* - become quite difficult, as long as the dissemination and disclosure, which should promote a determined BD stakeholders to allow access to information about the company is limited.

Conclusions

Even if the failure of principles and recommendations contained in different codes GC is still punishable by law, however, compliance has the effect of self discipline listed companies. If we consider the governance model adopted at the continental level in terms of study undertaken on the 65 companies listed on BSE, a weakness for 50% of the companies reviewed is that they are governed by the model tier (in a single Council meets both executive and non-executive managers), without the position of President to be separate from that of Managing Director. This does not just *increase the power improperly President-General Manager*, administrators can not take action only in a collegial manner. On the one hand, it is considered that directors should be an overall responsibility; on the other hand, their power could only peer, without being able to work towards disapproval of the conduct of the President. So long as *personal interest* overshadowing corporate social responsibility, investor confidence is destroyed and thus require reconsideration of the principles of CG, especially in terms of improved quality and transparency of financial reporting. We believe that restoring investor confidence in capital markets may be the consequence of a high degree of stringency *of corporate governance rules*. Negative findings drawn from the study may be the consequence of the adoption of a voluntary code CG. Imperative and mandatory adoption and implementation of codes of good practice could be a solution.

As political power, economic power must be limited by *separating the executive managers of non-executive managers*, and by dispersing ownership. Any shareholder has the tendency to abuse its power of control and lack of separation of the two categories of managers will lead undoubtedly *to a concern for personal interest, let alone the interests of the company*. In this respect, the dual structure of governance (either by separating the office of President of the General Manager, either by separating the Executive Board of Supervisory Board), that the legal obligation to publish the mode of remuneration of managers, the presence of independent directors, *transparency* in dissemination and publication of information in order to be allowed access to all information about the company stakeholders is a plurality of conditions for effective governance of companies, which will lead undoubtedly to optimize their economic and social objectives.

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HOW COULD HOSPITALS ACT IN AN AGEING SOCIETY?

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The demographic changes are of great importance for all European societies. Their impact and effects have multiple, deep facets. Each European healthcare and welfare system will be facing considerable changes in the new demographic context. The hospital sector plays an important role in each health system. This paper focuses on the impact of the demographic changes on hospitals, presents and analyzes statistical data for the German hospitals sector in order to underline the importance of the older age groups for the number of the hospital inpatient cases, the provided range of medical services and disciplines and for the hospital disease costs. The paper also reveals main findings from 30 interviews conducted in 2010 with German health experts (from hospitals, health insurance companies, universities, institutes and regional healthcare policy makers) that accepted to answer questions referring to the demographic impact on the German healthcare system and hospital sector. The results of the interviews show that hospitals will have to act and react to the demographic changes. German hospitals might play different roles in the healthcare service provision for older people when engaging in new models of integrated care that will have to be developed. Processes, structures, human resources expertise, hospital service provision and medical departments will undergo major changes in response to the demographic challenges. Networks, centres of excellence for older persons and integrated care will probably be indispensable structures of the German healthcare system in the future. Strategic partnerships with pre- and post-hospital healthcare service providers are considered to be top priorities for German hospitals when facing the demographic challenge. Central case management and process optimization can be essential factors of success in the hospital care of the older, multimorbid patients. Acute geriatric medicine will be a main quality feature for the hospital care of older patients not only in the German healthcare system.

Keywords: hospital care, ageing society, hospitalized elderly patients, demographic challenge, expert interviews.

JEL Classification Codes: I11, J11, M10.

I. Introduction

The demographic changes and their impact on society, on economic, healthcare and social systems have become the topics of an increasing number of publications in many European countries. Since the beginning of the third millennium there also have been many important contributions from the Commission of the European Communities, the European Parliament, the Council of the European Union, the European Economic and Social Committee etc. regarding the demographic changes and their multiple, complex effects. One of these contributions was the *Communication* from the Commission of the European Communities (2001: 4) referring to *the future of the health care and care of the elderly* in the European Union under following conditions: “[...] access to health care for all, a high level of quality in health care and [...] financial viability of health care systems”. Other activities of great importance (for the present and future demographic situation) have been referring amongst others to the “*common commitment by the Member States to combat neurodegenerative Diseases, particularly Alzheimer’s*” (Council of the European Union 2008a) and the “*public health strategies to combat neurodegenerative diseases associated with ageing and in particular Alzheimer’s disease*”

(Council of the European Union 2008b). In a recent, very important contribution, the European Economic and Social Committee (2010) pointed in detail at the amplitude of the demographic effect on healthcare and welfare systems in their recommendations meant to promote healthy ageing at both national and European level. Main aspects underlined by the European Economic and Social Committee refer amongst others to the necessity for “financial sustainability” of the welfare and healthcare systems, for developing “patient-centred”, “integrated” and “personalized” healthcare services and also for more intensive human resources training in geriatric medicine, and thus in the age-specific healthcare problems and needs of the older population (European Economic and Social Committee 2010: 5-6, 10); the Committee also grants local networks a major role in ensuring the coordination of the service provision for the older people in the future (European Economic and Social Committee 2010: 10-11). The demographic impact on the health care system has many facets and describes many changes. For example, there is a large body of studies revealing the benefits of geriatric medicine; in this context, the “European silver paper” published by Cruz-Jentoft et al. (2009: 54-55) recommends that *specialist geriatric care should be available for all hospitalized older people in Europe*. The hospital sector plays a very important role in every health care system, so that this paper focuses on illustrating and analyzing possible (realistic) future scenarios for hospitals when facing the demographic challenges. These scenarios represent future developments for German hospitals as expected and illustrated by 30 German health experts. Statistical data is presented to underline the importance and amplitude of this topic before the main findings from the expert interviews are being revealed.

II. Selected data on German hospitals

The latest diagnosis data for discharged (hospital) inpatients provided for Germany by the Federal Statistical Office (Statistisches Bundesamt 2011) show that the age group 65+ years accounted for about 43% (44%) of all hospital primary diagnoses (of the cumulated diagnosis group of *Diseases, injuries and poisoning*), whereas the age group 70+ years accounted for 34% (35%). Combining population with hospital diagnosis data for the year 2008 (as in figure 1 presented), one can notice that (when not considering the age group less than 1 year) only the older age groups (beginning with the age group 60-65 years) determined disproportionately high numbers of inpatient cases (as represented by the cumulated number of all inpatient diagnoses); the percentages of the number of the discharged (hospital) inpatients in the older age groups (in the total number of discharged hospital inpatients) were even up to 3 times higher (for the age groups 85-90, 90-95 years) than the percentages of the population of these age groups in the total German population.

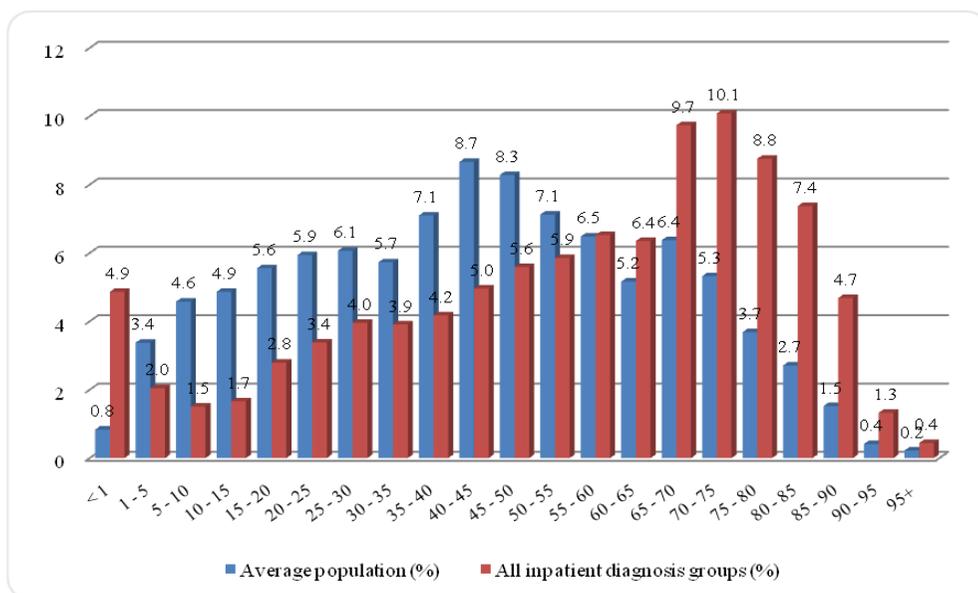


Figure 1: The percentage of the age groups in all inpatient diagnosis groups and total average population in Germany - 2008

Source: author's own calculations based on the available statistical data from Statistisches Bundesamt (2009, 2010b): diagnosis data – Statistisches Bundesamt 2009: Worksheet 2.1.1.1; demographic data – Statistisches Bundesamt 2010b: 44.
 Explanation: age group $x - y$ implies at least x years and less than y years.

Computations based on the hospital primary diagnosis statistics (Statistisches Bundesamt 2009, 2011) show that compared to 2008, in 2009 the number of the discharged inpatients increased by 1.6% in Germany, whereas the age group 70+ years accounted for almost 90% of this percentage growth. The association between the number of hospitalizations for specific groups of population and the hospital disease costs provided by the Federal Statistical Office (Statistisches Bundesamt 2010a: Worksheet 5.4) shows that 42% of the total discharged inpatients (representing the age group 65+) accounted for almost 49% of the total hospital disease costs. Comparing the hospital disease costs for the years 2006 and 2008 (Statistisches Bundesamt 2010a: Worksheets 4.4, 5.4), one can notice that the age group 65+ years contributed with 107% to the percentage growth (of 4.8%) of the hospital disease costs in 2008 (and the hospital disease costs decreased for the age groups 15-30, 30-45 years); further calculations based on the statistical data provided by Federal Statistical Office (Statistisches Bundesamt 2010a: Worksheets 4.4, 5.4) show that the hospital disease costs accounted for about 26% of the total disease costs in 2008 and their increase (in 2008 compared to 2006) contributed with 17% to the percentage growth (of 7.5%) of the total disease costs.

Table 1: Age-specific number of inpatient hospital cases per 1000 inhabitants in Germany - 2008

Selected Diagnosis Groups	All Age Groups	< 1 Year	1 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 - 90	90 - 95	95+
A00-T98 Diseases, injuries and poisoning	211	548	130	71	74	109	124	142	148	128	124	146	178	218	267	331	411	516	591	669	700	439
C00-D48 Neoplasms	23	7	4	2	2	3	3	4	5	8	12	18	24	33	46	58	64	66	59	49	37	19
E00-E90 Endocrine, nutritional and metabolic diseases	6	3	1	2	2	2	1	2	2	3	3	4	5	7	8	10	13	17	22	31	39	26
F00-F99 Mental and behavioural disorders	14	2	2	3	7	15	16	16	16	16	18	19	18	14	11	10	10	12	16	19	19	13
G00-G99 Diseases of the nervous system	8	7	4	4	4	4	4	4	4	5	6	7	9	10	12	14	17	21	23	25	22	11

Selected Diagnosis Groups		All Age Groups	< 1 Year	1 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 - 90	90 - 95	95+
I00-I99	Diseases of the circulatory system	33	2	1	1	2	2	3	3	4	6	10	16	24	37	52	71	98	131	153	175	177	103
J00-J99	Diseases of the respiratory system	13	66	41	14	6	10	8	7	7	6	6	6	8	10	12	16	20	29	38	47	61	43
K00-K93	Diseases of the digestive system	22	20	6	6	11	14	12	11	12	13	15	18	21	25	29	34	41	52	61	71	75	49
M00-M99	Diseases of the musculoskeletal system and connective tissue	19	1	2	2	4	6	5	6	8	11	14	18	23	30	34	40	47	51	43	34	23	10
N00-N99	Diseases of the genitourinary system	12	10	3	2	2	6	7	7	8	8	9	10	11	12	15	19	23	28	30	33	34	21
R00-R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	9	22	6	5	8	8	6	5	5	5	5	6	7	8	10	12	16	22	29	35	36	21
S00-T98	Injury, poisoning and certain other consequences of external causes	21	32	22	15	16	21	17	13	12	12	13	14	16	18	21	25	31	45	65	92	119	88

Source: table structure (diagnosis groups, age groups) adapted from Statistisches Bundesamt (2009): Worksheet 2.1.1.1; data in table 1 represent author's own calculations based on the available statistical data from Statistisches Bundesamt (2009, 2010b): diagnosis data – Statistisches Bundesamt 2009: Worksheet 2.1.1.1; demographic data – Statistisches Bundesamt 2010b: 44.

Explanation: age group $x - y$ implies at least x years and less than y years.

Analyzing the data from table 1, one can notice the high values of the age-specific number of inpatient hospital cases for *diseases, injuries and poisoning* per 1000 inhabitants in the older age groups; the age-related profile of the number of inpatient hospital cases per 1000 inhabitants (per age group) presents a continuously (remarkably) rising slope beginning with the age group 60-65 years and ending with the age group 90-95 years. The higher age groups (65+ years) are characterized by high(er) age-specific number of (discharged) inpatient hospital cases (per 1000 inhabitants) of diseases of the circulatory system, of the digestive system, of the respiratory system, of the musculoskeletal system and connective tissue, of injuries, poisoning and certain other consequences of external causes (when not taking into consideration the first two age groups) etc. Calculations based on the available statistical data (Statistisches Bundesamt 2010a: Worksheet 5.3) show that in 2008 the highest hospital disease costs were generated by the diseases of the circulatory system (18.4% of the total hospital disease costs), followed by neoplasms (13.5%), mental and behavioural disorders (11.1%), diseases of the musculoskeletal system and connective tissue (10.1%), injury, poisoning and certain other consequences of external causes (10%) and by diseases of the digestive system (8.6%) etc. The analysis has so far underlined the importance of the older age groups for German hospitals (in terms of number of discharged inpatients and disease costs) and some of the age-related diagnosis groups which are expected to grow in the future as direct consequence of the demographic changes. In addition, the expert interviews will reveal future scenarios for the German hospital sector facing the multiple facets of the demographic challenge.

III. How are health experts estimating the impact of the demographic challenge?

With the support of the top management of the German hospital Klinikum Ingolstadt, 30 German health experts (in management positions of non-profit, private and public hospitals and clinics, including also networks of such institutions, experts in health economics from German universities, experts from institutes and health insurance companies and regional healthcare policy makers) accepted in 2010 to answer specific questions referring to the demographic challenge and impact on the German healthcare system, especially on the hospital sector. The main findings of these interviews which are to be presented in the following concentrate mainly on main developments in the German hospitals as expected by experts in the changing demographic context. The multiple facets of the demographic challenge for the German healthcare system (as resulting from the conducted expert interviews) will affect also hospitals considerably (and they already do). The experts have mentioned amongst others following priorities for hospitals from the perspective of the demographic changes: closer networking with the out-patient healthcare sector, completion of strategic partnerships with pre- and post-hospital

care facilities, increase / improvement of the old age medical expertise of the hospital personnel, adaptation and optimization of the hospital admission process, adaptation of the hospital structures to the needs and problems of the older, multimorbid patients and cross-sectoral case management. Experts consider that networks and centres of excellence for older people will represent indispensable structures with precise task sharing and governance in the future of the German health system – hospitals will also have a clear role in these new healthcare structures. A higher degree of cooperation between hospitals and nursing homes, rehabilitation facilities and other post-hospital care service providers is expected to be achieved in the context of a more intensive focus of the German health care system on preventive measures and out-patient healthcare services and of a more intensive connection between the different sectors of the healthcare system. Some experts mention structural changes that would aim at the avoidance of (unnecessary) hospitalizations of older persons especially at the interface between nursing homes / rehabilitation facilities and hospitals. A concrete example refers to the health care service provision for the older persons in nursing homes that could be ensured by a special nursing home physician (as integral part of these facilities). The interviews have also revealed the fact that experts consider that hospital admission criteria will become stricter and more accurate; at the same time it could be expected that the control of the necessity for inpatient treatment would become more intensive. Most of them also emphasize the need for hospitals to concentrate more on the specific needs and problems of the older persons when deciding about their process structure, service activities and offerings, hospital architecture, service provision and human resources expertise. With regard to the hospital process structure, some of the experts point to the importance of the hospital admission process as it marks the beginning of the activity of the central case management and can influence considerably the hospital care- and post-hospital-pathway; geriatric screening and assessment are considered to be indispensable elements of the hospital admission process in order to guarantee an early detection of the geriatric patients and an evaluation of the age-specific health care needs and necessities; from the point of view of these experts, the hospital admission process is to be closely and tightly connected with the hospital discharge management in order to trigger the discharge preparation (including the post-hospitalization care) in due time and thus avoid delayed discharges and “bed-blocking”. Experts consider that the hospital processes must be designed and structured in a manner that ensures the optimization of the hospital length of stay of the older patients and must thus contain inter- and multidisciplinary structures and elements (including social care); more than else should hospital processes in ageing societies be transparent, accomplishable, well synchronised and adequate to the age-specific problems and needs. Transparency implies also on time availability of patient data and information, which plays a major role beginning with the hospital admission process (and often even before the hospital admission). The optimization of the hospital length of stay, continuity of care and avoidance of hospital readmissions imply (often) a tight cooperation and connection with post-hospital healthcare service providers; in this context the experts emphasize the need for more patient-centred, integrated (health)care. Experts also consider that new models of care have to be established and expect hospitals to engage themselves in these future healthcare structures (some of them especially for the healthcare of the older, multimorbid persons) – hospitals could be both partners and initiators in healthcare networking with service providers of other sectors of the German health system. Experts also have mentioned the strong belief that hospital processes will have to be more intensively accompanied by the hospital employees (and thus more labour intensive) due to the increased health care needs and problems of older, multimorbid and often chronically ill patients. As the DRG-system is not accounting for the differences regarding the labour intensity of physicians and nurses for older, multimorbid and younger patients, the demographic changes will determine an increased need for hospital personnel resources that is not additionally gratified. More than that, the present and future

situation on the labour market represents another problem for the hospitals. The demographic ageing of the population implies not only a higher number of older patients, but also more older employees; in this situation experts expect hospitals to develop adequate human resources development plans, innovative ideas for committing the personnel, the redefinition of labour division between the hospital professionals etc. In this setting, demographic-oriented human resources management should emphasize also the importance of team structures, broad qualification of the hospital employees, personnel training / formation in age-related diseases and characteristics and constant knowledge adaptation and transfer (age-relevant expertise). The need for more geriatric know-how and expertise (including high age healthcare characteristics, needs and problems for all hospital professionals) and for an increased deployment of physical therapists are considered to be self-evident by many experts, thus they have underlined the necessary financing (financial resources) of (for) the hospital personnel training and development and also for the higher labour intensity in the hospital service provision (generated for example by additional services provided by employees such as physician therapists). Many of these experts consider that the acute geriatric care represents an indispensable quality feature for the future hospital care of older persons. Experts have emphasized the fact that that hospitals without such departments will still have to guarantee and ensure the expertise for the hospital care of the older, multimorbid persons. The problem with the acute geriatric services in hospitals is their present financing in the DRG-system: there is no special gratification for hospital geriatric services except the gratification of the geriatric early rehabilitative complex treatment (integrated in a small number of DRGs), but the geriatric early rehabilitation represents only one part of the acute geriatric medicine. Under these circumstances German hospitals would provide the older, multimorbid patients with acute geriatric services with no additional financial resources. Other expectations from the acute geriatric medicine refer to benefits that would decrease the follow-up costs for the German health system (in terms of multiple, repeated investigations, medication, care costs etc.) The geriatric structures (for example the acute geriatric medicine departments in hospitals, out-patient geriatric services, geriatric day hospitals etc.) and expertise are still underdeveloped in some parts of Germany. A positive example supporting the development of acute geriatric departments can be seen in Bavaria, which enlarged its existing geriatric program with focus on geriatric rehabilitation by having adopted and implemented a new program for acute geriatric medicine, which contains quality requirements for the acute geriatric medicine departments in the Bavarian hospitals (Bayerisches Staatsministerium für Umwelt und Gesundheit 2009). Regarding the range of provided services (medical departments and disciplines), experts consider that hospitals will have to expand towards the age-related diseases and focus more and more on old age surgery and medicine. At the same time, the hospital service provision is expected to be characterized by a higher degree of care and sustainability. These are main findings from the interviews with the German health experts that show some of the complexity degree, amplitude and broadness of the demographic impact on German hospitals.

IV. Concluding remarks

The hospitals will be facing many challenges determined by the demographic changes. The statistical data and the main findings from the expert interviews show that hospitals will have to account more and more for the needs and problems of the older, often multimorbid patients. More than that, hospital processes and structures, the range of hospital services and medical departments, the expertise of the hospital employees will undergo considerable changes in response to the future demographic situation. Many of the findings are relevant not only for German hospitals, but generally for hospitals in ageing societies.

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PROBLEMS AND CHANCES AT THE INTERFACE BETWEEN HOSPITAL CARE AND GERIATRIC REHABILITATION

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Available statistical data offer valuable information on recent demographic changes and developments within European healthcare and welfare systems. The demographic evolution is expected to have considerable impact upon various, major aspects of the economic and social life in all European countries. The healthcare system plays an important role especially in the context of ageing societies, such as Germany. This paper focuses on the evolution of the prevention or rehabilitation service sector during the last years in Germany, analyzes the specific characteristics of the elderly patients being cared for in these facilities and underlines important aspects at the interface between (acute) hospital and geriatric rehabilitative care. Networking, integrated care services and models will be of even greater importance in the future demographic setting generating (most probably) increasing numbers and percentages of elderly, multimorbid hospitalized patients. More than this, the cooperation at regional level between acute geriatric hospital departments and geriatric rehabilitation facilities has become a mandatory quality criterion in the Free State of Bavaria. This paper presents and analyzes issues referring to a precise cooperation model (between acute and rehabilitative care) recommended for implementation even by the Free State of Bavaria while emphasizing several examples of good practice that have guaranteed the success of this cooperation model. The analysis of the main causes leading to longer length of stay (and thus “delayed discharges”) for the elderly patients transferred to geriatric rehabilitation facilities within the reference model for acute-rehabilitative care provides important information and points at the existing potential for optimization in the acute hospital setting. Vicinity, tight communication and cooperation, early screening, implementation of standard procedures and case management are some of the activities that have contributed considerably to the improvement of the hospital length of stay and transfer management for elderly patients benefiting from (follow-up) inpatient geriatric rehabilitation services. The presented facts are important not only for the German health setting.

Keywords: acute-rehabilitative care interface, demographic impact, process optimization, care networking, geriatric patients.

JEL Classification Codes: I11, J11, M10.

I. Introduction

An increasing number of publications have picked out issues referring to demographic changes and their impact on healthcare and welfare systems as a central theme. The expected increasing number of elderly inpatients in German hospitals emphasizes the need for detailed analyses with regard to the specific needs of the elderly, (often) multimorbid hospitalized patients; one of these specific needs refer to the benefits provided by geriatric rehabilitation services. The fragmentation of the service provision in the German healthcare sector implies a separation of the acute hospital care from the geriatric rehabilitative care, and thus the existence of an interface between these different healthcare sectors. This paper focuses on the analysis of recent developments in the rehabilitative care sector in Germany and of possibilities for its integration

with the acute hospital care illustrating opportunities and benefits resulting from strategic partnerships and cooperation between hospitals and geriatric rehabilitation facilities by means of a best practice model (from the Free State of Bavaria).

II. Selected data on German hospitals and prevention or rehabilitation facilities

Data analysis and calculations performed on statistical data (Statistisches Bundesamt 2006, 2007, 2008, 2009c, 2011c: Worksheet 2.1) have indicated following evolutions for the German inpatient prevention or rehabilitation service sector during the time period 2005–2009: the number of facilities, established beds and average inpatient length of stay decreased (by respectively 2.4%, 1.7% and 1.1%), whereas the bed utilization rate, number of inpatient care days and cases showed a positive trend (with percentage increase of respectively 11.2%, 9.3% and 10.6%); in addition, the direct inpatient admissions from hospitals increased by 15.9% (and to about 36.7% from the total number of the direct inpatient admissions to prevention or rehabilitation facilities in 2009), whereas the direct discharges (transfers) from these facilities into (to) hospitals increased by 4% (accounting for a relatively stable percentage of about 2.0 - 2.2% of the total number of discharges from prevention or rehabilitation facilities in the selected period of time). When focusing on the evolution of geriatric departments in prevention or rehabilitation facilities during the time period 2007-2009, the calculations performed on the available statistical data (Statistisches Bundesamt 2008, 2009c, 2011c: Worksheet 2.1) have indicated positive evolutions for the main analyzed indicators, such as: number of departments (+10.0%), establishes beds (+11.1%), inpatient care days (+13.7%), inpatient cases (+16.2%), accompanied by a decrease in the inpatient length of stay by 2.2%; at the same time, the number of direct inpatient admissions to geriatric departments increased by 16.9%, whereas the direct inpatient admissions to these departments from hospitals by (only) 11.2% (accounting in 2009 for 79% of all direct inpatient admissions to these departments, compared to 83% in 2007); in addition, the direct discharges (transfers) from these departments into (to) hospitals increased by about 11.2% (accounting for about 10.2–11.2% of the total number of direct discharges from these departments in the analyzed period of time). As a very high percentage of inpatient admissions to geriatric departments in prevention or rehabilitation facilities represent transfers from hospitals, we consider that it is important to point at the evolution of the inpatient hospital cases for specific age groups, as these evolutions are of high importance in the context of present and expected demographic changes. We analyze in this paper the interface between inpatient hospital care and inpatient geriatric prevention or rehabilitation services so that we will focus on the age group 70+ years according to the reference age in the definition of geriatric patients from the new program for acute geriatric medicine adopted in the Free State of Bavaria (Bayerisches Staatsministerium für Umwelt und Gesundheit 2009: 3). In 2009, the age group 70+ accounted for about 33.6%, respectively 35.0% of the inpatient hospital cases according to the hospital diagnosis statistics (Statistisches Bundesamt 2011a: Worksheet 2.1.1.1), respectively DRG-statistics (Statistisches Bundesamt 2010a: Worksheet 2.1.1.1) in Germany; comparing the statistical data available for 2007 and 2009 (Statistisches Bundesamt 2009a, 2009b, 2010a, 2011a: Worksheet 2.1.1.1), one can notice that the percentage increase in the number of inpatient hospital cases of the age group 70+ of almost 10% (according to both hospital diagnosis and DRG-statistics) accounted for about 80%, respectively 90% of the cumulated increase in the hospital inpatients (according to the hospital diagnosis statistics, respectively to the DRG-statistics). Considering some of the expected demographic effects (population decrease, considerable change of the population age structure), one could expect an increase in the hospital inpatients of the older age groups (and of the high-age related diseases) and thus an increase in the geriatric patients benefiting from geriatric rehabilitation after/during hospitalization. The statistical data available for 2009 referring to inpatients discharged from prevention or

rehabilitation facilities having a bed capacity of more than 100 (Statistisches Bundesamt 2011b: Worksheet 2.1.1.1) show that the age group 70+ accounted for about 26% of the discharged inpatients; the highest percentage of the primary diagnoses for this age group referred to diseases of the musculoskeletal system and connective tissue, followed by diseases of the circulatory system, neoplasms and injury, poisoning and certain consequences of external causes in prevention or rehabilitation facilities (see figure 1). The data in figure 1 point at differences in the importance of selected diagnosis groups between the older age groups discharged from prevention or rehabilitation facilities (expressed as percentage in the total number of inpatients in the respective age groups), such as for e.g. for the neoplasms (decreasing with age) or for the diagnosis group referring to injury, poisoning and certain other consequences of external causes (increasing with age).

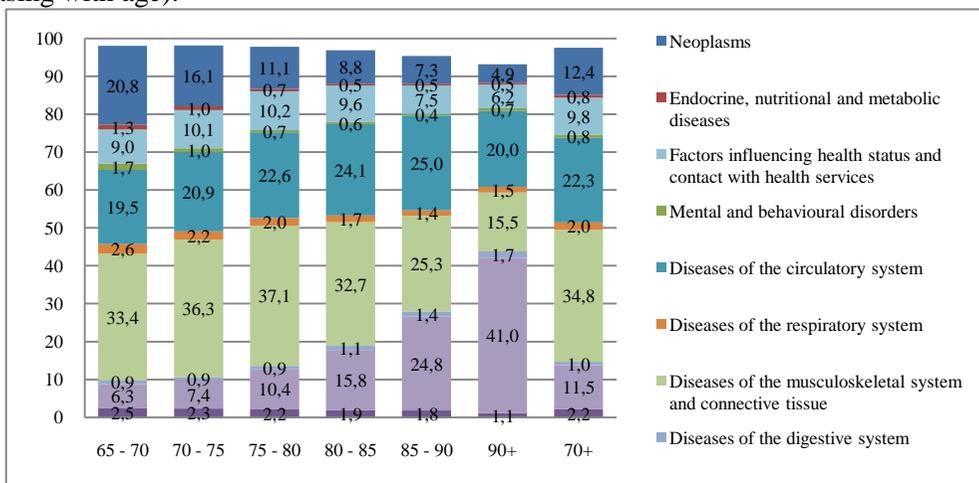


Figure 1: Percentage of the number of inpatient cases of a specific diagnosis and age group in the total number of inpatient cases of the selected age groups discharged in 2009 from prevention or rehabilitation facilities with more than 100 beds (%)

Source: authors' own figure and calculations based on the statistical data from Statistisches Bundesamt (2011b): Worksheet 1.1.1.1.

Explanation: age group $x - y$ implies at least x years and less than y years.

* - only facilities with more than 100 beds.

The analysis of statistical data has so far indicated the importance of transfers from acute hospital care for the geriatric medicine departments in prevention or rehabilitation facilities; more than that, geriatric rehabilitation plays an important role as it can significantly contribute to avoiding hospital re-admissions and nursing home placement of the elderly persons (as long as possible). The mandatory quality criteria of the new program for acute geriatric medicine in the Free State of Bavaria point at the necessity for acute geriatric departments (in hospitals) to cooperate at least with one regional geriatric rehabilitation facility and underline the importance of establishing care networks for the elderly persons, the acute geriatric medicine being an important, integral part of these networks (Bayerisches Staatsministerium für Umwelt und Gesundheit 2009: 8).

III. Identifying optimization potential and best practice for hospitals at the interface with inpatient geriatric rehabilitation facilities

How can a connection, (more precisely) an interconnected model of care between acute hospitals and geriatric rehabilitation facilities emerge in the present German healthcare setting? The German Subsidies (and Funding) Law is in this context problematic, as a general “merger (fusion)” of rehabilitation facilities with acute geriatric hospital departments (and even hospitals) and the follow-up out-patient care cannot take place in publicly-subsidized institutions (hospitals). In this situation, one alternative could consist in finding reliable partners that provide

inpatient geriatric rehabilitation services (and that could also provide geriatric rehabilitative day care and out-patient care) and that are ready to engage themselves in establishing geriatric rehabilitation facilities on the premises of hospitals. At this stage, it must be clarified whether the initial location of the geriatric rehabilitation facility (in Bavaria most of them being located in the Bavarian Alps in an idyllic position) can be changed when considering procedural and structural requisites and whether there will be a sufficient large incentive for the inpatient rehabilitation service providers to establish (move) their facilities in the vicinity of the acute care hospitals. The demographic changes facilitate such interconnected models of care (with one major advantage consisting in the provision of acute care and geriatric rehabilitation services within a campus structure, close to domicile) for the elderly persons in the context that an increasing number of this age group (with geriatric multimorbidity) is expected to be admitted to hospitals and benefit from acute geriatric medicine and geriatric rehabilitation services in a setting compatible with their social environment, domicile and actual home. One should also not underestimate the “marketing-effect” of such models of care that allow regular visits from family members during the hospital and geriatric rehabilitation facility stays (thus supporting the continuous contact of the elderly, often multimorbid patients with their social environment). The vicinity between the two institutions provide further benefits (for patient transfer, service provision etc.) when the building structures are connected. It is obvious that not only the patients and their families, but also both healthcare service providers (and partners) must and do benefit from such cooperation models. The acute care hospital may follow further objectives, such as: achievement of a better (hospital) inpatient length of stay management (process optimization, process duration reduction etc.), better treatment result for elderly patients, unique market positioning, ensuring care continuity, quality, uniformity and support within the network of care for the elderly population, the avoidance (decrease) of (in) hospital re-admissions, improve patient satisfaction and enhance patient loyalty, brand building and enhancement, establishment of an important, indispensable care structure within a network of care for elderly persons etc. At the same time the geriatric rehabilitation facility in the vicinity of the acute care hospital may aim at achieving following objectives: continuous, high bed occupancy and utilization rate, ensuring high (optimal) number of inpatient cases, improvement of the patient transition process between acute care and geriatric rehabilitation, high degree of reliability regarding the rehabilitation potential of admitted patients, that should and do benefit from the provided inpatient rehabilitation services. As shown in the specific case of the selected German acute care hospital having developed this kind of strategic partnership (the so-called “Ingolstadt-Neuburg acute-rehabilitative care cooperation model”) has continuously been expanded and intensified thus generating process optimization (also process duration reduction) in the acute care hospital, higher number of admissions in the geriatric rehabilitation facility and better transition from acute into rehabilitative care. The analyzed German acute care hospital has been characterized by large and increasing numbers of elderly hospitalized patients who often need follow-up inpatient (geriatric) rehabilitative services after the acute hospital stay. This specific acute care hospital (like many others) anticipates a significant increase in the number of inpatients that will follow this treatment (and care) process. The length of stay analysis conducted on all transfers from the selected German acute care hospital to geriatric rehabilitation service providers during one year (before process optimization) revealed a very high percentage of cases (more than 65%) with hospital length of stay over the average inpatient length of stay as published in the annual DRG-catalogue for Germany (and thus generating too high costs). The major causes for the high degree of “delayed discharges / transfers” to geriatric rehabilitation facilities that were identified within the conducted analysis revealed not only suboptimal internal structures and processes, but also potential for optimization in the cooperation with the geriatric rehabilitation facilities and in the communication with the agents and companies responsible for processing the approval forms for inpatient geriatric

rehabilitation services. In this context, based on the conducted internal analysis, following aspects need to be mentioned:

- *when referring to the causes related to human resources know-how, internal structures and process organization in the acute care hospital:* duration of the application process (for inpatient rehabilitative care) too long, inappropriate timing of filling in the application forms (often after having exceeded the average inpatient, catalogue-length of stay), insufficient know-how for justifying the need for inpatient rehabilitative care, incomplete (and late) identification of patients that could benefit from inpatient geriatric rehabilitation services etc.;

- *when referring to causes related to capacity and admission times limitations of the geriatric rehabilitation service providers:* high bed capacity fluctuations in geriatric rehabilitation facilities (leading to transfer problems and delays for the hospitalized elderly patients), limited admission hours/days in these facilities etc.;

- *when referring to the communication with the companies/agents responsible for processing the approval forms:* degree of further enquiries, declined applications and successful objections, (sometimes) human resource shortage (leading to long processing times) etc.

Since this analysis many activities have been performed in order to minimize waste and improve the situation. A recent analysis in the selected German acute care hospital showed that many of the implemented measures (early screening, standard procedure for filling in the approval forms, specific employee training, targeted case management etc.) led to better results. The very early, coordinated participation of the rehabilitation facility (by embedding the rehabilitation partner in the acute clinical process) and the tight communication between the two partners guarantee uninterrupted, high-quality care. The extension of the admission hours/days of the geriatric rehabilitation facility emphasized the willingness to cooperate and adapt on both sides. The basis for these activities is established via a cooperation treaty that provides the appropriate legal basis. One should not be surprised that this established (specific) networking model at the interface between acute care and geriatric rehabilitation (the so-called “Ingolstadt-Neuburg acute-rehabilitative care cooperation model”) is being recommended for implementation by the Bavarian State. This kind of strategic cooperation (for establishing care structures within networks of care for the elderly population) will become integral part of hospitals and rehabilitation facilities and thus indispensable when considering the expected demographic changes and the major factors that determine and control considerably the profitability and sustainability of hospitals and geriatric rehabilitation facilities – processes, structure, attractiveness of the medical care and treatment, “safety-thinking” and social environment of the patients. Both the increasing specialization of medical disciplines, complexity of technical requirements and the increasing financing difficulties emphasize the fact that this kind of cooperation is not only of great importance, but even inevitable - the specialization degree has become too high and the labour market too tight, so that single inpatient healthcare service providers are not able to provide and ensure comprehensive medical care without cooperating. In order for this cooperation model to be successful, the process structure of (between) the partners must be synchronized; the collaboration between the partners plays also a considerable role. Different healthcare service suppliers are also active with different priorities and needs in this context. A question that should be taken into consideration when referring to such cooperation model is whether this kind of strategic partnership could be even further expanded (intensified) in terms of establishing and developing a medical holding company (under a common corporate link). Such structural developments could determine the establishment of more efficient cost structures in areas that are not assigned exclusively to medicine. In addition, the existing interface between acute hospital care and geriatric rehabilitation would become smoother and one could further consider integrating the so-called “low-care-department (area)” between the acute clinical and rehabilitative care. Such a construct could serve patients waiting for the approval to be

transferred from the acute care hospital into the geriatric rehabilitation facility: these patients could get accommodation in this department (area) and thus already benefit from the services, competence and expertise of the geriatric rehabilitation service partner (provided in advance). This care construct would create the interface between a “low-med-” and “high-care-” department (area), which would ensure that patients could be treated in the transitional phase (between acute hospital care and geriatric rehabilitation) according to advanced concepts of care. When establishing such a care setting, it would be of great importance for the acute care hospitals and geriatric rehabilitation providers to persuade the health insurance companies to remunerate both (hospital and geriatric rehabilitation) services together by means of a complex flat rate. It seems that health insurance companies have already started (in 2011) to search for partners who are able to provide such concepts.

IV. Concluding remarks

Both the demographic changes and the increasing financing difficulties emphasize the need for analyzing, optimizing and monitoring internal processes and structures related to the transition of elderly patients between the acute hospital and geriatric rehabilitative care. The presented facts and figures from the German acute care hospital reveal clear potential for internal optimization and for optimization at the interface between hospitals and geriatric rehabilitation facilities. The presented model of acute-rehabilitative care emphasizes opportunities and benefits resulting from the vicinity and the tight cooperation between acute care hospitals and geriatric rehabilitation facilities. This model does not only guarantee high-quality care for elderly patients, but also generates economic advantages for both partners.

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OUTSOURCING STRATEGIES. HOW TO FORMALIZE AND NEGOTIATE THE OUTSOURCING CONTRACT

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In the globalized economy multinational firms have given rise to local firms able to produce at a low cost and at acceptable quality levels. A growing number of firms have outsourced production and manufacturing activities of all types to these firms, not only to reduce production costs but also to make their organizational structures more streamlined and flexible. Outsourcing decisions, which originally were limited to production which had a modest technological content and was of marginal importance for the business in question, is increasingly adopted for activities which, requiring core competencies or belonging to the core business, were considered inseparable from the organization and thus not outsourceable. Gradually an outsourcing strategy has developed which has found it convenient to outsource even core competencies and functions, such as specialized manufacturing, which require a particular technology, marketing, product design, and the search for know-how (Prahalad and Hamel 1990: 79-91).

Such an outsourcing strategy has a number of advantages, among which quality improvement, a greater focus on managing other core competencies, a greater flexibility and leverage regarding resources, along with the possibility of entering new markets, even ones with a high rate of development.

This article analyzes the fundamental stages for an outsourcing strategy. It will demonstrate how, in order to achieve an outsourcing strategy, it is necessary to include outsourcing in the general strategy, gather suitable information for choosing the outsourcer, negotiate the contract with the supplier, choose the type of relationship to have with the supplier, and, finally, plan the transfer of activities and functions from the outsourcee to one or more outsourcers or providers.

Keywords: outsourcing, outsourcing decision, strategic perspective, outsourcing contract, contract negotiation, outside information, organizational culture.

JEL Codes: M10, M19, L20, L21, L24, L26

1. Introduction. The object of outsourcing

Outsourcing functions, processes and activities, normally carried out inside the firm, through outsourcing contracts – by repurchasing through supply contracts the products or results of certain activities by firms delegated for such activities – is not a new phenomenon.

Starting from the early '80s, the use of outside suppliers has taken on new features. In the global economy, in many countries still referred to as the “Third World”, multinational firms have set up local companies able to produce at low cost and at an acceptable level of quality “(1)”; these firms have been handed production and manufacturing activities of all kinds by a growing number of firms, who are motivated by the possibility of reducing manufacturing costs as well as of streamlining their organizational structure.

In recent years outsourcing strategies have undergone a profound evolution, moving from simple forms of production contracts involving third parties to agreements that entail several

strategically important functions: from technological innovation to logistics, customer relations to post-sales services.

The outsourcing decision is not limited to marginal production with a modest technological content but is increasingly extended to activities that require “core competencies” that are part of the “core business”, activities which, until that moment, were considered an inseparable part of the firm and thus not outsourceable.

2. Outsourcing as a strategic perspective

Today firms consider outsourcing from a long-term, and thus strategic, perspective, whose aim is the outsourcing of functions and processes through a network of stable agreements with specialized outsourcers who take on the role of providers, with or without exclusivity.

Quinn and Hilmer have clearly summed up the four main advantages of outsourcing from a strategic perspective (Quinn and Hilmer 1994: 43-55):

1. maximizing the yield from internal resources by concentrating investments and effort on what the firm “does best”;
2. creating or protecting the competitive advantages by developing and strengthening the “core competencies” and building barriers against present or future competitors who might try to enter the firm’s areas of interest;
3. providing incentives to investments in the outsourcers’ technology and know-how, their innovations and skills, and their specialized activities, which the outsourcee can maintain in-house only through continual investments and innovation;
4. reducing the risks in rapidly changing markets and in the presence of fast-evolving technologies; an outsourcing strategy transfers outside the firm the risks from technological change and R&D costs, thereby shortening the production cycles and making the response to customer needs faster and more flexible.

Today the tendency is to achieve global sourcing and offshoring; that is, outsourcing that involves outsourcers located in countries other than that of the outsourcer.

With the decline in transport costs and the development of the merchant marine and container ships, globalization has begun to separate the “geography of production” from the “geography of consumption” (Mella 2007: 12).

Global outsourcing and offshoring are processes that best illustrate this tendency.

Outsourcing is transforming production from a relationship involving the supply of materials, components and services into a network of competencies involving research and development and planning.

Outsourcing has entered into new fields, from customer service to R&D to the study of new business models, even health care services.

Along these lines Champy writes, in his introduction to Koulopoulos and Roloff’s book: “*The forces of globalization have finally kicked in. ... Material and product sourcing move between multiple countries as a function of price, quality, and speed. And customers are everywhere expecting to be served with consistent quality and price, independent of location. The Internet has made markets global, even for the smallest company. In fact, information technology is the great enabler of those changes*” (Koulopoulos and Roloff 2006: 1-5).

3. The phases of the outsourcing strategy

An initial interesting model for the outsourcing decision – developed with reference to the industrial services sector, though of general validity – is presented by Kumar et al. (Kumar, Aquino and Anderson 2007: 323-342). After a preliminary brainstorming process on the fundamental internal and external variables that can influence the outsourcing decision – a

process which involves all the organizational levels of the outsourcing firm – the risks of outsourcing are then considered (Pellicelli 2008).

Jennings proposes a more general model according to which the outsourcing strategy can be outlined in the following phases (Jennings 1996: 393-405). (Table 1)

Table 1 – The phases of an outsourcing strategy.

PHASES	PRINCIPAL ACTIONS
<p>1. The objectives. Allocate outsourcing as part of the general strategy. Assess whether or not outsourcing is a feasible strategy for the organization, taking into account its current strategic objectives.</p>	<ul style="list-style-type: none"> • Define the long-term strategy for the function to be outsourced. • Consider the impact of the outsourcing decision on the chances of achieving the organization’s mission and strategies, including costs, quality, flexibility and time frame. Consider the changes in the business environment that would entail a change in strategy.
<p>2. Which activities to outsource. Collecting information. Collect and analyze information about the products/services to outsource and those than can be produced in house.</p>	<ul style="list-style-type: none"> • Identify the products/services to outsource and the expected performance levels. • Give a clear definition of these products/services. Identify the “core” competencies. Determine the current costs of the products/services to be outsourced and estimate the potential savings from outsourcing. • Obtain references about the supplier.
<p>3. Choosing the outsourcer. Set evaluation criteria to identify a group of potentially reliable candidates.</p>	<ul style="list-style-type: none"> ▪ Identify the number of suitable suppliers in order to have a vast and rational choice. ▪ Document the technical and managerial capacities of the candidate firms, their organizational cultures, and the potential fit (degree of integration with the outsourcer).
<p>4. Negotiating the contract. Aim for a contract that strictly establishes the services required and at the same time is flexible enough to permit the addition of future services as a response to unforeseen events.</p>	<ul style="list-style-type: none"> • Negotiate a fair and equitable agreement. • Specify the performances expected from each partner, how these should be measured and remunerated, and how any controversies that may arise are to be settled. • Clearly specify contingency clauses and how any subcontractors are to be managed.
<p>5. Transferring the outsourcer’s activities and functions to the supplier. Preparing a plan to transfer the outsourced activities to the supplier.</p>	<ul style="list-style-type: none"> • Set up a temporary working group to control and organize the transfer. • Actively involve those employees whose activities may be affected by the transfer. • Ensure that the managers of the functions or of those parts of the organization outsourced are actively involved in the decision-making process
<p>6. Choosing the appropriate outsourcer-supplier relationship</p>	<ul style="list-style-type: none"> • Buy the market, ongoing relationship, partnership, strategic alliances, upstream integration.

Source: adapted from Jennings 1996: 393-405

4. The objectives: what place in the general strategy?

Successful outsourcing starts with the clear definition of objectives and a clear assessment of how these can be satisfied by the outsourcer. Many failures are due to unrealistic or wrong expectations (Allen and Chandrashekar 2000: 5).

In general, there is more than one objective, and the first phase in the decision-making process involving whether or not and how to outsource starts by defining which processes or functions should be kept inside the firm.

For example, one objective of outsourcing can be to support a phase of strong growth, and thus it may have a temporary horizon; or it can signal the start of a new strategy. In addition to investments, developing the necessary production capacity takes time. If the firm has entered a phase of fast growth then outsourcing will allow it not to lose the opportunity to gain market share, develop its own business, and increase supply without additional fixed costs.

Especially when we are dealing with the outsourcing of Information Technology, the “business recovery” objectives should be evaluated, thus considering what the impact could be on the firm’s activity if the supply of a particular strategically-relevant product/service were interrupted or did not respect the agreed-upon specifications.

5. Gathering internal information and the choice of activities to outsource

According to Prahalad, firms should outsource only those processes and activities they know well; he asserts that they should not outsource to resolve problems they are unable to solve internally (Prahalad 2004).

Moreover, they should not hand over entire functions, which constitutes the “brute-force approach”. For example, a firm could hand over a sales activity but should maintain data analysis activities in-house (Prahalad 2004). It is not always necessary to transfer an entire function. Maintaining part of the activities of a function in-house reduces the risk of choosing the wrong supplier and allows the firm to transfer at a later date the entire function if expected performance is below expectations. For example, a firm can transfer the active invoicing cycle and wait to transfer the passive cycle, which in general is more complex.

The decision as to which functions to transfer is always the result of a comparison between advantages and disadvantages, many of which are common to the various functions and activities, while others are specific.

Bragg offers several general suggestions regarding specific functions and activities, such as those which are listed below (Bragg 2006: 160-180).

A. Credit collection. The risk is that the supplier may be too aggressive in his approach to the debtor and the creditor firm can lose the customer.

B. Salaries and contributions. This is the function which, more than any other, is outsourced. If the firm has several operational units spread out over several geographic areas in which the outsourcer is present, then the latter can assure the necessary services with greater uniformity and timeliness.

C. Computer services. The main advantage of outsourcing this service is the reduction in capital investments in computers, investments which will have to be made by the supplier, who may even buy the computers from the outsourcee, thereby freeing up liquidity. Outsourcing this function can also lead to disadvantages that cannot be ignored. Bragg presents some of these in detail (Bragg 2006: 164-166). In particular, Espino-Rodriguez et al. have examined the outsourcing strategy in computer systems in the hotel sector by constructing a theoretical model which, when applied to that sector, shows how outsourcing does not lead to an effective

strengthening of the capacity to manage the resources used in computer systems and in information technology (Espino-Rodríguez and Gil-Padilla 2007: 757-777).

D. Customer service. The main advantage derives from the outsourcer's experience in responding to the customer requests and in managing complaints; if the outsourcee is a prestigious firm it can contribute to the outsourcer's reputation.

E. Planning and R&D. Transferring the personnel to an outsourcer with high qualifications (higher than those of the outsourcee) would streamline the function and, if this is carried out by a highly specialized team with great potential, could provide better results in terms of innovation and patents. The advantage of turning to a supplier is decisive when the firm has a request from a customer which it cannot meet in the short term due to a lack of resources (human and financial).

Nevertheless, even this form of outsourcing entails serious risks. The idea of the "outsourcing-offshore" is "synonymous to cost cutting", but firms who go this route often forget to do so in a way that increases their capacity to compete.

Wrong outsourcing choices have also caused a diminishing of the firm's capacity to compete and led to their decline (Bettis, Bradley and Hamel 1992: 7-22; Brown and Wilson 2005: 30-34). This means that the firm must be able to identify which activities to outsource without risking negative effects on their capacity to compete. Quinn and Hilmer have listed three classes of strategic risks firms can face when they outsource: 1) the loss of critical capacities or competencies; 2) the weakening of their capacity to coordinate more than one function; 3) the loss of control over the supplier (Quinn and Hilmer 1994: 43-55).

Kearney's study on the reasons that make outsourcing a problematic choice highlights that the main fear of the outsourcee is the loss of control over the outsourcer, in particular the risk it will be less able to protect its intellectual capital (Kearney 2005: 1-97).

6. The gathering of outside information and the choice of outsourcer

Gathering information on the potential outsourcer can start by contacting firms that have had dealings with the outsourcers: individual firms or associations of firms that can serve as references for the outsourcing candidates.

The technical possibilities of producing the product/service and management's capacities are the most important criteria for choosing among the outsourcers. There is a clear relation between the risks faced by the outsourcee and the supplier's capacities: the greater the latter, the fewer the risks for the outsourcee.

According to Stacey, during the implementation of the outsourcing this information must be shared and periodically discussed with the outsourcer (Stacey 1998: 24-27).

A particular aspect to consider is the size of the outsourcer: whether the outsourcer is a large or small firm. The answer depends fundamentally on the type of activities and the volume of services to outsource. In general a large outsourcer, one who can guarantee the desired volumes and quality, is preferred to a small firm, which must be the object of constant and costly controls on the part of the outsourcee.

It must be pointed out (Bragg 2006: 30-34) that the supplier can also be a large firm that produces for its own market but, since it has excess production capacity, is willing to also produce for other customers; it may be a good idea to make use of this willingness in order to outsource modest volumes of activities.

To decide which supplier to outsource an entire function (or part of a function) to, there is need for an accurate knowledge of the potential outsourcer which identifies its objectives, including how it operates to achieve its profits and to compete with its rivals.

It should always be remembered that organizational culture may be at the basis of outsourcing choices. An example of how an organizational culture may condition the choice of outsourcing strategy is Codelco, a Chilean copper mine reputed to have one of the best managements despite being partly state-run. Codelco had to decide which functions to keep in-house and which to outsource. The problem was how to create an outsourcing strategy in a sector such as mining, which traditionally invests little in information technology. The greatest problem was management's resistance due to a culture based on centralization (Upton, Staats and Fuller 2007). Table 2 presents information that is useful for evaluating the potential of outsourcer candidates.

Table 2 – How to evaluate the potential of the supplier. Some of the possible questions to ask firms that can provide references for previous experiences with the supplier.

1. How did the supplier manage the transfer (transition) of the functions from the outsourcer to its own organization?
2. What is the level and quality of the resources employed?
3. How would you describe the services provided by the supplier?
4. How was the transfer of personnel to the supplier's organization managed?
5. What were the differences in pay and benefits for the transferred personnel?
6. What was the level of responsibility given to the employees transferred to the supplier compared to the previous level in the outsourcing firm?
7. What is the quality of the supplier?
8. How and to what extent did the supplier respond to indications of defects from its own personnel?
9. What is the level of technology adopted by the supplier?
10. To what extent does the supplier use sub-contractors?
11. How did the supplier deal with any conflicts with the firm?
12. How did the supplier manage any contract renegotiations?
13. How detailed is the calculation of costs (invoicing) by the supplier?
14. Did the supplier share with the firm any cost economies not provided for in the contract? If so, in what way?
15. To what extent did the costs charged by the supplier meet the firm's expectations? Were there any economies with respect to the costs when the production occurred in-house?
16. How did the supplier manage the services not included in the contract and to what extent did it take account of the related costs?
17. How were any problems not touched on in the previous questions managed by the supplier?
18. Would you use the supplier's services again? Why or why not?

Source: Bragg 2006: 32.

The geographical distance between outsourcee and supplier can be important in some cases, and become a determining factor when emergency actions are required, when the outsourcee has several business units spread over several geographic areas where the outsourcee is not present and would thus be forced to turn to sub-suppliers from a local firm, and when transport times are such as to compromise the rapid buildup of inventories in certain geographic areas with regard to sectors having strong sales volatility.

Even the age of the outsourcer candidate is of great importance.

In general, new firms are flexible, offer better services and frequently innovate, but they are also the most vulnerable. Those who have been in the market for some time can have greater financial stability but are often slow to innovate and are not very flexible.

7. The contract negotiation

There are different procedures for drawing up the contract, the most frequent of which we will now summarize.

After having chosen a group of potential outsourcers the firm sends each a “Request-For-Proposal” (RFP), in which some information are requested as: information on the firm and sector, activities to outsource, recourse to sub-suppliers, length of contract, transfer of personnel (Bragg, 2006).

The information obtained from the RFP is only the starting point for the selection of the outsourcer and stipulation of the contract.

The contract must be specific enough to clearly regulate every key aspect and at the same time flexible enough to allow the parties to face the consequences of unforeseen events without conflicts arising.

In particular, the contract must define the evaluation criteria for the performances and what will occur if these criteria are not fulfilled. It must establish whether or not the supplier can, in turn, use sub-suppliers. Many contracts provide for arbitration in order to resolve disputes.

In order to effectively start the negotiation the firm must understand where and to what extent the supplier earns a profit.

Even if the fundamental parameter for outsourcing is not price, if the competition among suppliers is effectively arranged then the prices offered are low and the margins reduced.

There are various tactics potential outsourcers can adopt to win the contract.

Frequently the contract contains only those clauses relating to the essential services in the platform of basic services, and additional costs are incurred for each contingency service not included in the platform. The firm responds by trying to broaden the platform and clearly defining the prices for the contingency services.

At other times the supplier renounces profits for an initial period, offering modest prices, only to ask for price adjustments later on when the outsourcee has reduced its capacity to backsource, having given up carrying out the outsourced activities. In order to make it less convenient for the outsourcer to rescind the contract, the supplier imposes high penalties for withdrawal. The outsourcer, in turn, can respond by imposing short-term contracts with low penalties for an early withdrawal.

Arjun and Subhajt, after demonstrating how widespread and serious the controversies are, especially in offshore outsourcing, present the results of a comparative analysis of the procedures adopted by a sampling of firms in order to evaluate risks and of the policies adopted to select the offshore partners.

Moreover, the authors recommend undertaking preventive due diligence for each phase of an outsourcing agreement (Arjun and Subhajt 2007: 21-46).

When the outsourcing concerns the production of goods or the supply of services, firms often turn to pilot programmes, where the supplier identifies a limited group of customers and agrees on a period of time – which can vary from 30 to 90 days – during which the customers use the service according to the agreed upon standards.

The supplier that wishes to purchase the services to give back in outsourcing generally supplies the services during this trial period at zero cost, or at a very low cost.

8. The transfer of activities and functions to the outsourcer

A plan agreed upon by the two parties – linked to the outsourcing contract – establishes the time frame and mode for the transfer of the outsourced functions.

The preliminary information for the outsourcer's personnel and the latter's involvement is important in this phase. Often there is recourse to a project team whose aim is to manage the transfer.

For simple activities, such as maintenance, the transition can be swift. However, this is not the case for complex activities. Too fast or hurried a transfer may not allow the outsourcer sufficient time to thoroughly learn about the activity to transfer.

The firm that turns to outsourcing generally starts by outsourcing a function (or part of a function) that has a modest impact on its economic results and on the organization, in order to reduce the negative impact of performances that do not meet expectations.

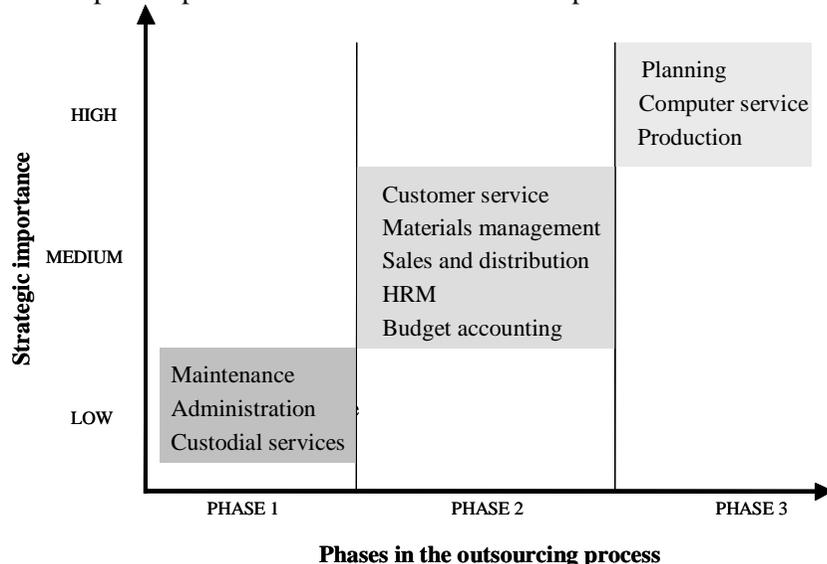


Figure 1 – Time frame for the outsourcing of various functions. Source: Bragg 2006: 30.

There are various approaches in this regard. Following Bragg, an initial approach is to follow the proper procedure regarding union relations by informing the personnel as soon as possible that the firm is considering outsourcing options (Bragg 2006: 32).

In any event, the communication must provide the personnel with valid and convincing reasons for outsourcing since deciding whether or not to outsource a function or activity in any case represents a negative assessment of the personnel who are involved in those functions and activities, which could spur the best employees to leave the firm.

Thus the firm should inform its employees only after the specifics of the contract have been defined.

The difficulties with this way of communicating are evident: 1) it is difficult to hide the selection process from the potential suppliers; 2) there are also negative effects on employees involved with those functions not being outsourced, since the suspicion may arise that the firm is hiding from them decisions that concern them.

The most complex phase is deciding which persons will be transferred to the outsourcer and with what responsibilities and salary.

It is important that: a) meetings be frequently held among the “key personnel involved”, and at least once a year for those in charge at the highest levels; b) periodical meetings be maintained

even when there tend to be no more problems; c) the persons in charge of communications not be replaced.

9. The choice of relationship to have with the supplier. Forms of direct control over the outsourcer

After deciding to outsource, the problem arises concerning the type of relationship to have with the supplier.

If we limit our attention only to typical outsourcing, then we can distinguish between the following forms: a) outsourcing as a partnership, with direct control over the outsourcer in the form of corporate or formal control; b) the outsourcing of supplies without direct control in the form of a partnership.

The first alternative is preferable when the objects of outsourcing are the strategic functions and activities that fall within the core competencies and the core business; since the outsourcer outsources those functions and processes which are vital for its survival, the firm faces the risk of seeing its organizational structure weakened, so that it is natural that, where possible, it tends to acquire or maintain control over the outsourcer.

In order to maintain control over the outsourcer, the outsourcing firm can enter into an outsourcing relationship in one of the following ways:

A) Setting up a fully-owned company to carry out the outsourced activities. . This is the preferred alternative for banking and insurance groups that are outsourcing complex functions, such as management control, auditing, and the assessment and liquidation of damages.

B) Hiving off, or transferring a business while maintaining total or legal control; this solution leads to the same results as the previous one, but has the advantage of simplifying even more the transfer of assets and personnel as well as creating a better market image.

C) Acquisition of an already-existing company or participatory control in this company; this solution differs from the previous ones in that the outsourcer outsources activities through a supply contract with an outside supplier but, in order to gain control, purchases – in one of the many forms possible – the company in question. The main advantages of this alternative are that it obviates the need to form a new organization – as the outsourcer's organization is still active – as well allows for full control (acquisition) or participatory control (share ownership).

D) Participation in strategic alliances where there is close and wide-ranging interaction among the partners, even in the form of consortiums or joint ventures, following a tendency that has become more marked in recent years. This solution is practicable especially for the outsourcing of functions that require specialized competencies which are jointly carried out by several co-venturers – research and development, advertising, etc. – with the agreement to jointly use the results obtained. Together with the advantage of producing a streamlined outsourcing with limited costs there are those deriving from a limited control and the lack of a need to outsource internal organizational structures.

In recent years new tendencies have emerged in relations between the firm that outsources without formal corporate control and its supplier.

1) Long-term relations. The average length of outsourcing contract has noticeably increased.

2) Greater cooperation. The supplier, even if not subjected to corporate control, tends to become more and more a partner, since the costs incurred by the supplier can also be considered as costs for the outsourcer and the innovations introduced by the latter can translate into future outsourcings of production lines to the supplier. Thus a lengthy and stable collaboration is in the interests of both sides.

3) A large reduction in the number of suppliers. This tendency is common to all sectors and has given rise to considerable risks for the buyer, who can find himself in an undesirable and at times dramatic position of dependence.

4) Greater use of EDI (Electronic Data Interchange) and of other communications technologies.

5) Agreements for the gradual reduction of costs (and thus prices) by the supplier.

6) Agreements for the improvement in the quality of products by the supplier which represent components for the buyer.

7) Supplier involvement in the development of new products.

Obviously the type of relation depends on the market structure and on the types of supplies provided by the supplier.

Table 3, adapted from Cohen, Agrawal and Flaherty, summarizes the characteristics of five types of possible relation between buyer and supplier in an outsourcing context, listed in order of intensity (Cohen and Agrawal 1996; Flaherty 1996: 26).

Table 3 – The characteristics of the different types of relations with the supplier.

“Buy market”	the “On-going relationship” ^(II)	Partnership	Strategic Alliance	Upstream integration
<ul style="list-style-type: none"> · Arm’s length^(I). · Clear definition of components. · Interaction via computer (EDI). · Many agreements with competitors. 	<ul style="list-style-type: none"> · Medium-term contracts. · Some information sharing. · Good relations with management · Some agreements with competitors 	<ul style="list-style-type: none"> · Long-term contracts. · Vast exchange of information. · Trust among partners. · Agreements of limited importance with competitors. 	<ul style="list-style-type: none"> · Long-term relations. · Full sharing of information and programmes. · Large scale trust and fusion among cultures. · No agreements with competitors. 	<ul style="list-style-type: none"> · Control of supplier’s capital. · Full sharing of information and programmes. · A single culture. · No agreement with competitors.
<p>(I) Simple agreement between buyer and seller, who have no other type of relation. (II) “On-going relationship” indicates relationships with several suppliers. On a case by case basis the firm chooses the one more suitable for its supplies.</p>				

Source: adapted from Cohen and Agrawal 1996; Flaherty 1996: 26.

If the outsourcing relationship creates strong uncertainty regarding the buyer’s important objectives, then the relations with the supplier should be very close. In order to reduce uncertainty some firms adopt vertical integration, others strategic alliances. To find the best solution Pyke suggests going back to examining the four main objectives of operational management – costs, quality, delivery and flexibility – citing the example of a clothing company whose main competitive factor is its high product quality (Pyke 1998). Uncertainty about maintaining the quality of the fabric, which is vital for its strategic objectives, suggests it move to a close relationship with its suppliers along the lines of a strategic alliance.

10. Conclusions

Once the firm has decided on outsourcing and the activities that will be involved it must plan its implementation. The most important and complex phase is the choice of supplier, especially if the firm already has a network of relations with outside suppliers, each of whom is specialized in a particular area.

The most important and necessary phases of an outsourcing strategy are the decisions about the objectives to achieve through an outsourcing strategy and the activities to outsource.

In the first phase the firm must assess whether outsourcing is a feasible strategy for the organization given its current strategic objectives. Jennings identifies the following necessary steps (Jennings 1996: 393-405): 1) define the long-term strategy for the function to be outsourced; 2) consider the impact of the decision to outsource on the achievement of the mission and strategies of the organization, including costs, quality, flexibility, and the meeting of deadlines; 3) consider changes in the environment that require a change in strategy.

In the second phase the firm must gather and analyze the information on the products/services to outsource and those to produce in-house and decide which to outsource. In this phase the firm must (Jennings 1996: 393-405): 1) identify the products/services to outsource and the expected performance levels; 2) give a clear definition of these products/services and identify the core competencies; 3) determine the present costs of the products/services it intends to outsource and estimate the potential economies; 4) gather references on the supplier.

The other phases that concern the selection of suppliers, contract negotiation, the transfer of activities, and the relationship to enter into with the supplier require in any case a careful evaluation and must therefore be adequately planned in order to ensure a successful outsourcing strategy.

Notes

“(1)”: By “quality” we refer to at least two correlated aspects: 1) the set of characteristics that make a given system/process/object suitable to be used for a particular purpose; this form represents the extrinsic, use, or functional quality; the set of purposes for which the system/process/object can be useful for a particular subject is defined as the use function; 2) the set of characteristics that make a system/process/object conform to a reference sample – either observed or expected – that defines its functioning; this form of quality is defined as the intrinsic, project, or instrumental quality. However, from these basic notions we can see the difficulty of defining the meaning of quality; this term is fleeting, and an understanding of it is normally left to intuition (Mella 2005: 25-52).

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DESCRIPTIVE ANALYSIS OF THE INTERNATIONAL MIGRATION PHENOMENON IN ROMANIA BETWEEN 1991 AND 2008

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Migration represented and represents a very important phenomenon at global level, taking into consideration besides its demographic implications, its extremely diverse implications such as socio-economic, socio-cultural, territorial, or environmental. This represents, probably, the main reason why the research on migration is interdisciplinary, having strong connections with sociology, political sciences, history, economics, geography, demography, psychology, or law, among others. All these disciplines target different aspects of population migration, and a proper comprehension of the phenomenon implies a contribution from the part of all of them. Although migration represents a phenomenon manifested since ancient times, it has never been such an universal or significant phenomenon from the socio-economical or political perspective, as it is in present times. International migration has both a negative and positive impact on both provider and receiving countries, in general playing a very important role in the structure and dimension of the population of a country. Romania is not an exception to the previously expressed statement; furthermore, after the fall of the communist regime, migration became for Romania one of the most important socio-economical phenomena. The present paper aims at analyzing in a descriptive manner the international migration phenomenon in Romania between 1991 and 2008, from quantitative perspective. Based on data identified in the "Statistical Yearbook of Romania" - 2008 and 2009 editions - the analysis revealed the fact that both immigration and emigration flows registered oscillatory evolutions in the analysed period, but the general trend of immigration was of increasing, while the one of emigration was of decreasing. Immigration was dominated by the presence of males, of persons aged between 26 and 40 and of persons coming from the Republic of Moldova. On the other side, in the case of emigration the significant presence of females, of persons aged between 26 and 40, of persons of Romanian nationality and of those who preferred as main destination country Italy, was remarkable.

Keywords: international migration, immigration, emigration, Romania, descriptive analysis.

JEL Classification: F22, O15

Introduction

After the fall of the communist regime in 1989, migration represents one of the most important socio-economic phenomena in Romania. For many years, the high migration potential and the supposed permeability of the Romanian borders represented one of the main reasons which lead to its late adhesion to the European Union (EU) as, in general, West countries were "frightened" of the potential number of Romanian immigrants associated with a high robbery rate, expected as a consequence of the adhesion (Michalon 2005 cited in Potot 2008: 88). In the actual international frame, the migration phenomenon in Romania represents a process which, managed in a proper manner, can become an important generator of prosperity for our country. Taking into

consideration the major economical implications of migration - especially on the labour market - the present paper intends to analyse the international migration phenomenon in Romania between 1991 and 2008 in a descriptive manner from a quantitative perspective, in order to provide it a comprehensive image and to represent a starting point for potential future research on the economical implications of migration in Romania. In this sense, the present paper is structured into two parts. The first one puts forward a series of methodological aspects associated to the conducted analysis, while the second one presents the analysis' main results. The paper ends up with a series of final considerations.

Methodology

For the descriptive analysis of the international migration flows in Romania, data identified in the "Statistical Yearbook of Romania" – 2008 and 2009 editions – was processed. According to the National Institute of Statistics (2010: 39), the terms used in this paper, associated to international migration, are defined as follows:

- "International migration represents the change of permanent residence to another country or, from another country to Romania.
- Data on emigrants refer to Romanian citizens who settled their permanent residence abroad.
- Data on immigrants refer to citizens from another country who settled their permanent residence in Romania."

Furthermore, it is necessary to specify the fact that, whenever the terms of "immigration" or "emigration" are used, they refer to the number of immigrants, respectively emigrants registered during the year. Taking into consideration the above presented definitions associated to international migration, it is mandatory to outline the fact that the statistical data utilized in the analysis refer only to legal definitive migration.

Another series of data utilized in the analysis refers to population. In this sense, according to the National Institute of Statistics specifications, the population has as reference period the 1st of July of each year. "For intercensus years, the inhabitants' number has been determinate based on data from censuses and those from current evidence referring on vital and migration statistics. The inhabitants' number was calculated from data of the Population and Housing Census regarding the population with permanent residence in Romania, plus natural increase and balance of international migration determined by permanent residence changes, for population at national level" (National Institute of Statistics 2010: 37).

Before presenting the descriptive analysis, it is important to mention that the identified data were utilized for processing in the same manner they were identified in the previously mentioned sources; no transformation occurred on them.

Descriptive analysis – main findings

Between 1991 and 2008, both immigration and emigration flows registered oscillatory evolutions (Figure no. 1). In what concerns their trend orientation, in the case of immigration this was positive (the number of immigrants varying from one year to another in average with 496 persons), but in the case of emigration this was negative (the number of emigrants varying from one year to another in average with -2084 persons). Thus, it can be appreciated that, between 1991 and 2008, the general trend was of decreasing the number of persons who legally emigrated definitive from Romania. Legal immigration to Romania registered the highest value from the analysed period in 1998, when it increased with 643.26% in comparison with 1991. Starting with 2005, immigration to Romania was in continuous growth, this being potentially explained by a series of progresses associated to the regulation in the field of migration in Romania, especially in the frame of its adhesion to the EU; over the years, the regulation on migration in Romania has been improved in order to adopt the communitarian acquis in this field. Also, another factor for

explaining the increase in immigration in Romania in the previously mentioned period could be represented by the fact that, starting with 2004 the Romanian labour market expanded. In 2006, a series of branches (such as constructions or confections) were confronted with a lack of labour force; in order to solve this problem, entrepreneurs active in these branches resorted to immigrants supplying labour – especially from Turkey and China (Horváth 2007: 4). In what concerns the evolution of emigration in the analysed period, although the year 1990 was not included in the analysis, it is mandatory to outline the fact that this was the moment when legal definitive emigration from Romania reached its highest value (96929 persons). From the analysed period, the years 1991 and 1992 were the ones when were reached the highest values of emigration from Romania, the maximum being in 1991. The unstable economic and politic environments, emphasised by the political violence and interdictions generated by an administration, in general, inefficient could represent potential causes of high emigration immediately after the fall of the communist regime (Horváth 2007: 1). Also, after the fall of the communism, the free movement of the population was guarantee by the Constitution (Săseanu, Neagu and Petrescu 2010: 778). The years post-accession (2007 and 2008) represented for Romania period of increase of immigration and decrease of emigration; the quality of EU’s member, emphasised by the disequilibrium on the labour market and by the clear trends to a demographic crisis, lead to the becoming of immigration an ongoing demographic phenomenon in Romania (Neguț, di Comite and Neacșu 2010: 577). A factor of explaining the increase in immigration in Romania in 2008, could be represented by the openness – more than ever – of the labour market for individuals supplying low and medium labour (Ministerul Administrației și Internelor 2011). In what concerns the international migration balance, between 1991 and 2008, it was negative expressing a number of emigrants higher than the one of immigrants, leading to the idea according to which Romania represents a provider country of immigrants. Exceptions were registered in 2001, 2007 and 2008 when immigration surpassed emigration; 2001 being a year when the two flows tended to equalise each other (Figure no. 1).

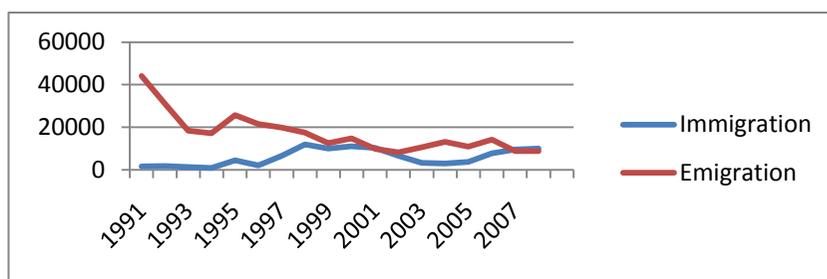


Figure no. 1: Evolution of the international migration flows between 1991 and 2008 (number of persons)

Source: produced by the authors based on data from National Institute of Statistics 2008, 2010

In what concerns the description of the international migration flows by gender, the situation is different in the case of immigration and emigration. In what concerns immigration, in every year of the period 1992-2008, the majority of immigrants in Romania was represented by males. In 1991, males only represented 36.27% out of the total immigrants (Figure no. 2). Thus, it can be stated that, during the whole analysed period, males represented the majority of immigrants to Romania, respectively 55.52%. According to the Ministry of Administration and Interior (2007), the high share of males in the total of immigrants in Romania could be explained by the migration for business; male entrepreneurs immigrants (especially those from Turkey or China) initially migrated in Romania in order to start and to develop a business, and only after reaching a stability point they proceeded to family reunification. In the case of emigration, in each year from

the analysed period, females registered a higher share in the total of emigrants from Romania, in comparison to males; the only exceptions were the years 1992 and 2001, when only 48.37%, respectively 49.49% out of the total emigrants were females (Figure no. 3). Thus, it can be appreciated that, during the whole analysed period, the highest share in the total of emigrants from Romania was represented by females (54%).

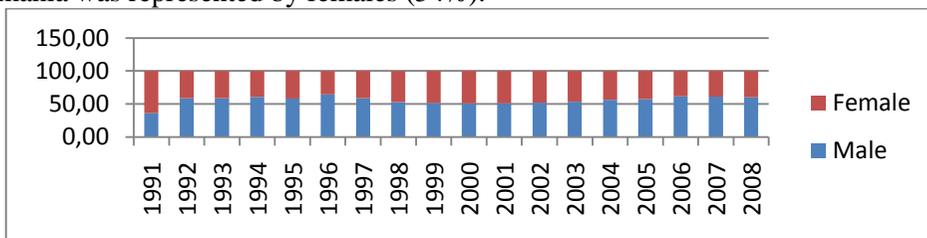


Figure no. 2: Immigration flow's structure, by gender (%)

Source: produced by the authors based on data from National Institute of Statistics 2008, 2010

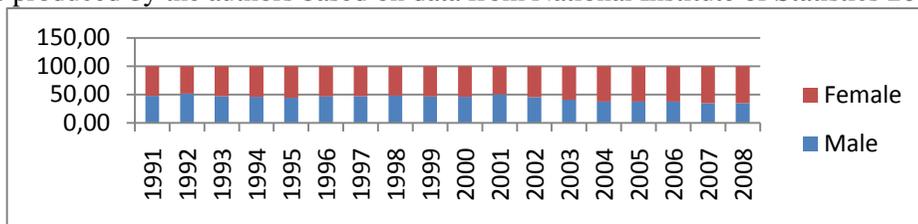


Figure no. 3: Emigration flow's structure, by gender (%)

Source: produced by the authors based on data from National Institute of Statistics 2008, 2010

Also, by dividing the total number of immigrants, respectively emigrants to Romania between 1991 and 2008 by the total population of Romania at 1st of July of each year from the mentioned period, it resulted that, in general, immigrant males have a higher share in the total of males in Romania than have the immigrant females in the total of females in Romania, while in the case of emigration females were more migratory than men in the analysed period.

Furthermore, analysing the international migration flows by age revealed the fact that in the case of immigration and emigration flows, the highest share in the total was represented by the persons aged between 26 and 40, during 1991 and 2008. This category presents a high level of interest for the labour market and it also represents a category of persons already trained, with a high innovation and work potential and extremely flexible (Constantin et al. 2004: 75) (Figure no. 4 and Figure no. 5)

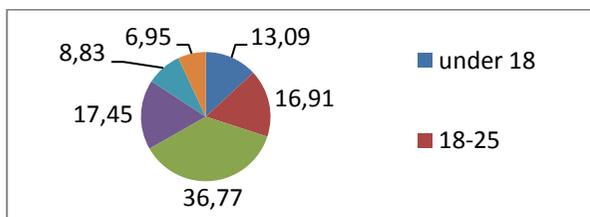


Figure no. 4: The share of the persons from the analysed age categories in the total of persons which immigrated in Romania between 1991 and 2008 (%)

Source: produced by the authors based on data from National Institute of Statistics 2008, 2010

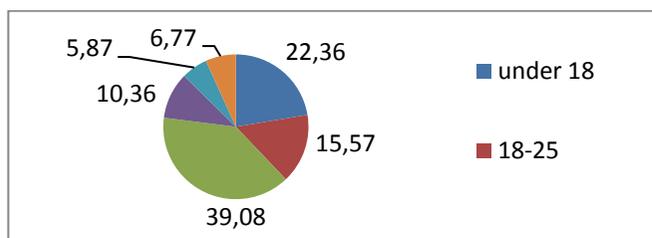


Figure no. 5: The share of the persons from the analysed age categories in the total of persons which emigrated from Romania between 1991 and 2008 (%)

Source: produced by the authors based on data from National Institute of Statistics 2008, 2010

In what concerns the analysis of the immigration flow by origin country, it could be accomplished only for the period 1994-2008 when, the majority of immigrants in Romania were coming from the Republic of Moldova (Figure no. 6).

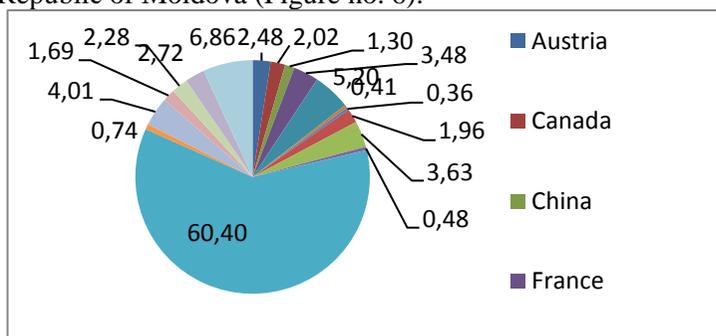


Figure no. 6: The share of the persons coming from the analysed countries in the total of persons which immigrated in Romania between 1994 and 2008 (%)

Source: produced by the authors based on data from National Institute of Statistics 2008, 2010

The descriptive analysis of emigration by nationality, revealed the fact that in all the years between 1991 and 2008 the highest share in the total of emigrants from Romania was represented by Romanians; in 2007 and 2008 they had a share of 97.27%, respectively 97.09%. Also, it is mandatory to outline the high shares of Hungarians and Germans in the total of emigrants from Romania after the fall of the communist regime, respectively the period 1991-1994, in comparison to more actual years like 2007 or 2008 (Figure no. 7). Thus, it can be appreciated that, at the beginning of the '90s, emigration was marked by the ethnic factor; on the basis of ethnic discrimination and hoping for better lives, the ethnic minorities from Romania migrated to countries to which they were historically connected (Horváth 2007: 1; Constantin, Nicolescu and Goschin 2008: 33).

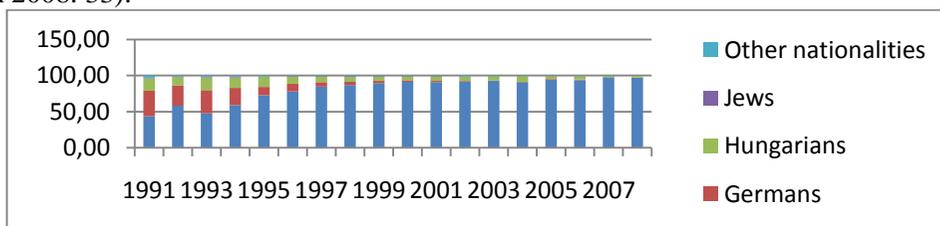


Figure no. 7: Emigration's structure between 1991 and 2008, by nationality (%)

Source: produced by the authors based on data from National Institute of Statistics, 2008 2010

Also, analysing the emigration flow by destination country, it revealed the fact that between 1991 and 2008, the vast majority of emigrants preferred Italy, followed by the U.S.A and Canada (Figure no. 8).

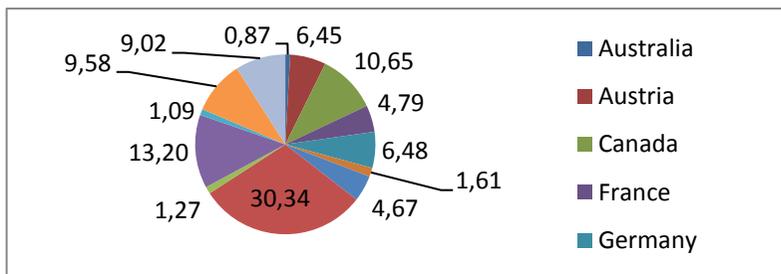


Figure no. 8: The share of emigrants from Romania in the total emigrants from Romania during 1991-2008, by destination country (%)

Source: produced by the authors based on data from National Institute of Statistics 2008, 2010

Conclusions and limits of the analysis

The descriptive analysis revealed the fact that both immigration and emigration flows registered oscillatory evolutions between 1991 and 2008. The general trend of immigration was of increasing, while the one of emigration was of decreasing. Immigration was dominated by the presence of males, of persons aged between 26 and 40 and of persons coming from the Republic of Moldova, while emigration was dominated by the presence of females, of persons aged between 26 and 40, of Romanians and of those who preferred as main destination country Italy. The major limit of the analysis is represented by the fact that, as the used statistical data refer only to legal definitive migration, the analysis does not reflect the real dimension of the phenomenon. Also, another limit refers to the fact that the period of analysis has as final point the year 2008. In this sense, future direction of analysis is represented by updating the series of data - as much as possible - in order to offer a more adequate image of the migration phenomenon in Romania, especially for analysing its evolution in economic crisis period.

Acknowledgements

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THE INTANGIBLE ASSETS INVESTMENTS CHARACTERISTICS AND THE ACCOUNTING TREATMENT

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In the knowledge-based economy the fundamental determinants of the enterprise value, in the present, have an intangible nature. The intangible investments are the most important factors of the enterprise success. Wealth, growth and welfare are driven nowadays by intangible investments. The knowledge economy is characterized by huge investments in human capital and informational technology. Despite of the increased importance of intangible assets, as the source of the firm` competitive advantages, the information regarding these kind of assets, both available in the inside of the firm and, which is presented to the externals, is pour. In this paper I present the reasons for this situation.

Keywords: intangible, investments, assets, accountancy, value

Cod JEL : G31

1. Introduction

It is widely accepted nowadays that, at the begin of the 21th century, economy has become significantly different from the industrial economy previous to the mid-20th century. Economists consider that the main feature of this new economic environment is the essential role played by intangibles as a fundamental determinant of value creation in business companies.

Investment expenditures represent outlays by the firm made in the expectation of future benefits (Fisher 1930). The assets that are the result of the investments are utilized in the firms` activities in the future periods. These assets can be classified function on their nature in tangible and intangible assets.

In the knowledge-based economy the fundamental determinants of the enterprise value, in the present, have an intangible nature. The intangible investments are the most important factors of the enterprise success. Wealth, growth and welfare are driven nowadays by intangible investments. The knowledge economy is characterized by huge investments in human capital and informational technology.

With the arrival of the new information technologies, the structure of firms have changed dramatically, shifting the focus of value creation from tangible based activities to intangible based value creation (MERITUM, 2002).

2. The accounting treatment of intangible assets investments

Despite of the increased importance of intangible assets, as the source of the firm` competitive advantages, the information regarding these kind of assets, both available in the inside of the firm and, which is presented to the externals, is pour.

To a big extent, this can be attributed to the restrictive requirements imposed by accounting standards, in most countries, for the recognition of intangible investments as assets in the financial statements. The current accounting regulation does not allow companies to capitalize a big part of investments in intangibles and to report these as assets in the financial reports. I refer to intangible assets that are produced by a company. There are inconsistencies regarding the book-keeping treatment of the two categories of intangible assets: internally generated and, acquired from the outside of the firm. Generally, the intangible assets independently acquired from the outside of the firm, are capitalized at the cost implied by their acquisition. On the other

part, the costs associated with developing internally generated intangible assets are treated as expenditures and are reflected in the revenues and expenses situation.

When it comes to the recording of internally generated intangibles, very little has changed during the last decades. Traditionally, the sums allocated to the internally generated intangible assets are treated as expenses not like investments that are capable to generate long term economic benefits. The expenditures on R&D, training, marketing are not treated as capital expenditures. As a result, these funds are not capitalized on the balance sheet. This is happening in conditions in which the value of intangible investments has increased very much during the time. The amount of unrecorded intangibles assets has changed enormously in last years being huge in the present.

As a result, the ability of financial statements to provide an accurate view of the firm's financial position seems of potential for future wealth creation. *The book value* of equity is the accounting estimate of the firm's value resulting from deducting debt from the book value of assets (the accounting estimate of the economic value thereof).

Therefore, the difference between the market value and the book value of equity is explained by the existence of intangible assets that are not reflected in the balance sheet.

The proportion of tangible assets to intangible assets has changed dramatically over the past 50 years. For example, in June 2000, Microsoft's physical and financial assets represented less than 10% of its market value, and those of Cisco only 5% (Lev, 2001).

In knowledge intensive industries a firm's book value is often lower than 10% of its market value, of which the largest part are constituted by intangible assets such as relations to customers and business partners, a company's workforce, patents, trademarks or other intellectual property, organizational capital in form of superior business processes, organization structures and a unique corporate culture (Lev, 2001).

2.Intangible investments from an economic and accounting perspective. The results of research

Remaining this category of intangible assets outside of the financial situations should not be taken as evidence that businesses do not recognize the investment nature of intangibles, as they do. The absence of a great part of intangible assets from financial report is explained by the fact that it is considered that intangible investments have economic properties that, for the most part, do not fit into conventional accounting principles (L. C. Hunter, Elizabeth Webster and Anne Wyatt, 2005).

From an economic perspective, intangible investments are any expenditure not immediately embodied in physical matter, but which are intended to generate long-term benefits.

Intangible investments are only recorded in the accounting system, as assets, if the items meet the two categories of criteria (IAS 38): first, *the asset definition criteria* and, second, *the asset recognition criteria*.

As summarized in table 1, the asset definition criteria for intangible assets comprise three attributes: identifiability, control and, future economic benefits.

IAS 38 states an intangible asset as *identifiable* when it is:

- separable (capable of being separated and sold, transferred, licensed, rented, or exchanged, either individually or together with a related contract);
- or, arises from contractual or other legal rights, regardless of whether those rights are transferable, or separable, from the entity, or from other rights and obligations.

This requires apply whether an intangible asset is acquired externally or generated internally.

It is considered that an entity *controls* an asset if the entity has the power to obtain the future economic benefits flowing from the underlying resource and, to restrict the access of others to those benefits (IAS 38).

The accountancy standards include *future economic benefits* as the main feature of an asset. These may include revenue from the sale of products, services, or processes but, also, includes cost savings or other benefits from the use of an asset. The benefits generated by intangibles are incorporated into the financial accounts, but not the value of the assets unless they are acquired from outside of the enterprise.

Recognition, usually, refers to the technical accounting term of whether the asset is included in firms' financial statements (K.P. Jarboe & R. Furrow, 2008).

The accounting standards stipulate that for intangible "resources" to be included as assets in an entities' balance, they must comply with:

- a) The definition of intangible assets;
- b) The recognition criteria established in accounting regulations.

The accounting regulations agree that intangible assets are non-tangible resources (that is, without physical substance), controlled by entities from previous transactions, that will provide future economic benefits to the entity.

According IASB (2001), an item that meets the definition of an element should be recognized if:

- it is probable that any future economic benefit associated with the item will flow to or from the entity; and
- the item has a cost or a value that can be measured with reliability.

If an intangible item does not meet both the definition of and the criteria for recognition as an intangible asset, IAS 38 requires the expenditure on this item to be recognized as an expense.

In table 1 are reflected the general criteria that must be satisfied for recognizing the intangible assets in financial reports (IAS 38).

The distinguishing characteristics of intangible assets render them in many cases outside this description.

Identifiability

For an asset to be recognized under current accounting rules, it must be able to be separated (divided) from other assets of enterprise and transferable to the other entities without the loss of value.

A major problem with intangible assets is that they are often difficult to identify separately, and thus, may not match one of the fundamental requirements for accounting recognition.

It is difficult to separate intangible assets from other intangible assets and, from current expenditures. Breaking up intangibles into discrete, separable entities is difficult. Certain types of intangible assets are easier to separate than others. This is the case of components of intellectual property.

Transferability is closely tied to the issue of separability. A major question defining an asset is whether it can be transferred to other parties without losing value. In the case of intangible assets this is possible only in some cases, as with intellectual property transfers. However, many assets are purely firm-specific and contain little if any value outside of the enterprise that they belong to (K.P. Jarboe & R. Furrow, 2008). Most firm-specific forms of human capital fit into this category, as do marketing and organizational capital.

Napier și Power (1992) make difference between:

- entry separability;
- exit separability

Entry separability means that the asset can be identified as it is produced or acquired by a firm: it therefore requires that the costs of production or acquisition can be accurately assessed and identified with the asset. The accounting standards require the historical cost of an intangible asset to be ascertainable, as a basic premise for recognition.

Exit separability implies that the asset can be traded separately from other intangibles of the firm or from the firm as a whole.

Belkaoui (1992) distinguishes two main types of intangible assets: identifiable intangible assets such as patents, and unidentifiable assets, such as goodwill.

Identifiable (separable) intangibles are those which can be sold or acquired separately.

Unidentifiable intangible assets are reflected in enterprise GW and can not be transferable separately but only with the sale of the whole enterprise.

There are two basic views of goodwill: it may be understood as the consequence of a firm's above-normal ability to generate future earnings, or as a set of assets controlled by an acquired company but not reported in its financial statements.

The unidentifiable intangible assets obtained with the new company acquisition are named *external GW*. These elements including the clients, the name and location of the business, the market position, the structure of organization, prestige and creativity, human resources, are recognized in financial situation and, are recorded as assets since they are valued in a market transaction. Intangibles that are bought as a complete set, externally through the market, are included as assets since they *have a verifiable cost*.

In contrast, *self-generated goodwill* or, *internal goodwill*, does not satisfy the accountancy requirements and can not be recognized as asset in the enterprise financial report. As a consequence internally investment in brand development, workforce skills and new innovations is expensed.

The Future Economic Benefits:

The accountancy standards include future economic benefits as the main feature of an asset. The intangible asset must have capacity to contribute, single or in combination with other assets, directly or, indirectly, to future net cash inflows.

The most obvious evidence of future economic benefit is a market price. The existence of the transaction and paying a price for a element is a prove of it's recognized utility and of it's capacity to generate economic benefits as a result of utilization

It is considered that any element that is bought and sold on the market can generate future economic benefit. And, any element that creditors accept in settlement of liabilities can generate future economic benefit. And, any element that is used to produce goods or services, whether tangible or intangible, and, whether or not, it has a market price, or is otherwise exchangeable, also generates future economic benefit. Incurrence of costs may be also significant evidence of acquisition or enhancement of future economic benefits.

The current accounting systems are based on transactions. The asset recognition criteria related to the probability of benefits generation is always considered to be satisfied in the cases of intangible assets that are obtained from outside of the firms, separately, or as result of business combination. In this case there is a price that is considered both prove of benefits generation, and a reliable indicator of the value.

Since the accounting data are relied upon by managers and outside investors, the accounting rules favor objective, verifiable valuations such as arm's-length, market-based transactions (L. C. Hunter, Elizabeth Webster & Anne Wyatt, 2005).

In the case of firm's acquisition the value of intangible assets purchased (if the purchase price exceeds the book value of the assets) is reflected in the external GW. Because this type of goodwill is the result of a purchase, the accountancy principle allows recognizing it as a asset in balance-sheet. Thus, the purchase puts a value on the intangibles.

The real world phenomena that do not find the origin in past transaction (the elements of internal GW) are not considered suitable for recognizing in financial report (J. García-García & M. I. Alonso de Magdaleno, 2010).

The condition related to the probability of future economic benefits generation is not considered satisfied in the case of this kinds of assets because does not exist neither a benefits generation prove, nor a reliable indicator of the value.

Thus, the risk of these assets is generally higher than that of physical assets, so the property rights over these assets are often not fully capitalized by the company (J. García-García & M. I. Alonso de Magdaleno, 2010).

It must be rejected the argument that costs are assets. Although an entity normally incurs costs to acquire or use assets, costs incurred are not themselves assets. The essence of an asset is its future economic benefit rather than whether or not it was acquired at a cost.

In the efforts made in purpose of recognizing the intangible assets in the balance sheet there are many problems that must be solved related to determine whether future economic benefit will be truly available and, quantifying it, especially, if obtaining of benefits is far away.

The question that requires answer is: how can be treated an element in the following situations:

- in the case in which the value of estimated future benefits is highly uncertain or, even, doubtful;
- in the case in which the future benefits may appear during the short time;
- in the case in which the duration of obtaining benefits is highly uncertain.

The element must be recognized as asset in balance-sheet, expensed, or reflected as a loose? Expenditures for R&D are examples of items for which management's intent clearly is to obtain or increment future economic benefits but for which there is uncertainty about the extent, if any, to which the expenditures succeeded in creating or increasing future economic benefits (J. García-García & M. I. Alonso de Magdaleno, 2010).

The control

The accountancy standards require that for an entity to be able to consider an element in balance-sheet she must be capable to control an item's future economic benefits.

The necessary conditions to control an element are as following:

- the entity has capacity to obtain future economic benefits as result of owning and exploiting the asset;
- the entity has capacity to restrict access of others to these benefits.

The classical view of control over assets is based on scarcity. To enjoy an asset's benefits, an entity generally must be in a position to deny or regulate access to that benefit by others (J. García-García & M. I. Alonso de Magdaleno, 2010).

An entity, usually, gains the ability to control an asset's future economic benefits through a legal right. But the firm can appeal to other methods for this. One of the methods utilized is keeping secrets through the employer's confidentiality.

L. C. Hunter, Elizabeth Webster & Anne Wyatt (2005) mentioned that, generally, exist a limit regarding the enterprise capacity to control the estimated intangible assets benefits for two reasons:

- the domination of the production process by the people (and not by the equipments);
- the ease of copying non-embodied forms of intellectual capital.

Conclusions:

The accountancy standards has not taken steps to allow for the capitalization of most internally generated intangibles. The economic tension lays in the inherent property rights problem associated with the benefits from intangible investment: it is often difficult to obtain defensible property rights because the intangible asset is embodied, often, in employees who cannot be owned. From an economic perspective, this problem does not change the "investment" nature of the expenditures. As a result, the ability of financial statements to provide an accurate view of the firm's financial position seems to have decreased over the last few decades, along with the

increase in the importance of intangibles. The information provided by companies to the financial markets is primarily based on traditional tangible investments in fixed assets, whereas value is more and more relying on investments in intangible assets.

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EUROPEAN CROSS-BORDER MERGERS AND ACQUISITIONS- REALITIES AND PERSPECTIVES

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This paper analyses the impact of the economic and financial crisis on merger and acquisition activity in Europe and the latest trends manifested on the cross-border merger and acquisition market involving European companies. Thus, a first objective of this research is to reveal the evolution of the European cross-border merger and acquisition activity in terms of dynamics, volume and structure. Another objective of this research is to reveal the short and medium term perspectives on mergers and acquisitions in Europe. Thus, under the continuous economic recovery of the European countries and the other worldwide economies, the recovery of financial markets and the growth of corporate profits, we shall witness an intensive cross-border merger and acquisition activity in Europe. The expansion engine of these operations seems to be represented by the emerging economies. This research is based on a systematic, logical and comparative analysis of scientific literature and statistical data regarding the cross-border mergers and acquisitions that involve European companies in recent years. This paper is part of the doctoral thesis "Mergers and acquisitions- strategies of growth and development of enterprises. European and national particularities", coordinated by professor Ph.D. Alina Bădulescu from University of Oradea, Faculty of Economics. The doctoral research is supported by The Sectorial Operational Program for Human Resources Development 2007-2013, Contract POSDRU 59/1.5/S/1- "Romanian researchers through modern and efficient doctoral programs".

Keywords: cross-border mergers and acquisitions, firm strategy, external growth, economic and financial crisis, economic recovery

JEL Codes: F23, M10, M16

Introduction

This paper is part of the doctoral thesis "Mergers and acquisitions- strategies of growth and development of enterprises. European and national particularities", coordinated by professor Ph.D. Alina Bădulescu from University of Oradea, Faculty of Economics. The doctoral research is supported by The Sectorial Operational Program for Human Resources Development 2007-2013, Contract POSDRU 59/1.5/S/1- "Romanian researchers through modern and efficient doctoral programs".

In the light of recent events that took place on the global economic scene, this paper intends to analyze the impact of economic and financial crisis on merger and acquisition (M&A) activity in Europe and the recent trends shown on the cross-border activity that involved European companies. Thus, in the first part we revealed some aspects regarding the literature on cross-border M&As. The next part deals with a recent analysis of the European activity evolution on cross-border M&As in terms of dynamics, volume and structure. The fourth part of this paper presents the short and medium term perspectives on M&As in Europe. Finally, there are some conclusions drawn from the research that was conducted.

Research methodology

This research is based on a systematic, logical and comparative analysis of scientific literature and statistical data regarding the cross-border M&As that involve European companies in recent

years. Thus, we carried out a quantitative analysis revealing the impact of the economic and financial crisis on M&A activity in Europe and the latest trends manifested on the cross-border merger and acquisition market involving European companies.

A brief review of the literature on cross-border mergers and acquisitions

In the literature, several studies have examined the field of cross-border M&As. Thus, some researches focused on the macroeconomic determinants of cross-border activity (Neto, Brandão și Cerqueira 2010: 21-57; Manchin 2004: 4; Rossi and Voplin 2004). Martynova and Renneboog (2006: 3-4) or Evenett (2003: 443,445) analysed cross-border M&As since 1990s, period that represented the first truly international merger wave, one of its characteristics being the large the share of cross-border activity in the total volume of M&A. Another research area, in cross-border M&As, is represented by their effects on the corporate performance and on shareholders' value creation (Goergen and Renneboog 2004: 9-45; Gugler, Mueller Yurtoglu and Zulehner 2003: 625-653; Moeller and Schlingemann 2003: 533-564). They discovered that the performance of cross-border deals is lower than in the case of domestic operations.

The impact of economic and financial crisis on European cross-border mergers and acquisitions and recent trends

After a five-year period of continuous growth of merger and acquisition activity, touching the peak in 2007, the European M&As have recorded a downward trend since 2008 due to economic and financial crisis. European economy, as well as other world economies, has been seriously affected by economic recession and financial markets turmoil. Economic and financial crisis has spread rapidly throughout the world, reflecting the interdependence of economies. The year 2008 marked the end of a four-year cycle of steady worldwide growth, in Europe too obviously, which reached climax in 2007 with a value volume of cross-border M&As never seen before. The increase of M&As between 2004 and 2007 was favoured by sustained growth of worldwide economy, liberalization of trade and investment regimes and the adoption of large-scale internationalization strategies by many transnational corporations.

The recession that began in 2008 has forced many potential acquirers to change their expansion plans by means of acquisition. Acquirers wishing to continue the taking-over process were to find out that the access to finance was severely affected. Many bidders who have signed agreements with target companies have sought to renegotiate the transaction or waive it. Thus, many transactions were void. However, as often happens in times of recession, companies with large capital provisions have taken advantage of the opportunities arising on the merger and acquisition market. The year of 2009 recorded the lowest level of merger and acquisition activity, both in terms of their value and number. Europe was severely affected by this recession, and within it, the European Union whose companies were major acquirers, but also main targets on the global market of M&A. The EU registered a pronounced decrease related to this activity. This reflects the strong economic relations that exist, on the one hand, between the European Union and the rest of the world, and on the other hand, between the Member States of the Union. The longest and deepest economic recession in the history of the European Union economy, as it is characterized by the European Commission in the economic forecast of 2009 (European Commission 2009:7), resulted in a notable decline of trade and investment flows between the EU and the world, but also among the Member States.

Diminishing the profits of companies and the stock market drop had severely decreased the value and number of cross-border M&As. At the same time, the decrease of demand for goods and services has prompted companies to restrict their investment plans abroad, both through M&As and Greenfield investments, although the latter declined since 2009. The decrease in cross-border M&As has contributed most significantly to the decline of foreign investment flows in 2009, which decreased by 34% worldwide (65% in value), compared to a 15% decrease in the number

of greenfield investment (UNCTAD 2010a:9). The global crisis reduced the funding available for FDIs and merger and acquisition operations.

According to UNCTAD statistics, the global cross-border M&As in 2008 declined by 30.9% to \$706.5 billion compared to the record level registered in 2007 of \$1,022.7. The decline was more pronounced in 2009, therefore the amount of worldwide cross-border M&As had declined by 64.6% compared to the previous year, reaching only \$249.7. The crisis impact on cross-border M&As is obvious, as seen by different regions and economies. Among developed economies, Europe, and especially the **EU-27** economy (which weighs significantly in the total of merger and acquisition activity across Europe) was seriously affected. Thus, net sales in developed Europe cross-border activity declined by 51% both in 2008 compared to 2007 and 2009 compared to 2008 and they reached 133,871 billions \$ in 2009. EU economy faced a 52,3% decline in net sales in 2008 compared to the peak year 2007, respectively 53,7% in 2009 compared to 2008 and reached 116,226 billions dollars, which reflected an emphasis of the recession this year. In 2008 the collapse of M&As that had as target EU companies was more pronounced compared to the one recorded worldwide (30.9%) and by the group of developed countries (34.8%). In 2009, all worldwide regions and economies were badly affected and the downward trend generalised even in countries that had not been affected in the previous year (e.g. in U.S. mergers and acquisitions of companies have continued to grow in 2008 by 37.8% compared to 2007, but in 2009 they have decreased by 82.3%).

Regarding the purchases performed by developed Europe's corporations, these dropped by 36,9% in 2008 compared to 2007, the decline being more pronounced in 2009 when purchases declined by 71,3% compared to 2008, summing up only 102,709 billions dollars. Net purchases realised by EU companies, initially dropped by 42,9%, the decline being more pronounced in this case than for the group of developed countries whose acquisitions have decreased by 32,5% or for Japan whose purchases increased by 85,7%, but less pronounced than in the case of the U.S. whose acquisitions have decreased by 60,9%. In 2009 net purchases realised by UE corporations fall out by 70,7% compared to the previous year at 89,694 billions dollars and the decrease in was even more pronounced than in USA (-66,1%) or Japan (-69%).

Transition economies in South-Eastern Europe were also severely affected, although the amount of their value was much lower than that of developed countries. Practically, on the international merger and acquisition market, the companies located in these countries have played a predominant role of targets of these operations. In terms of cross-border merger and acquisition value in South-Eastern Europe and CIS, in 2008, decreased by 33% compared to the previous year, so that from \$20,337 billion it reached \$7,125 billion. In 2009, the decline was more pronounced, summing up 65%, so that net sales reached only 896 millions dollars. This severely decrease was due to the decline in acquisitions made by the EU-15 companies, which were the main acquirers in the area. Actually, in the last years, firms from UE-15 concentrated their attention on the new member states UE-12 and on the other emerging countries of Europe.

The extent of the decline in cross-border activity was more pronounced in the old member states than in the new ones. The main European bidders came from UE-15 (Great Britain, France, Germany, Italy, Spain), but the global recession produced dramatic changes in the major investors hierarchy. Thus, Great Britain had to cede the leader position in cross-border purchases to France. On the other hand, UE-15 countries represented main targets in European cross-border activity, and the top five countries by net sales value includes Great Britain, Netherlands, Spain, Germany and France. Still, these countries were most affected by the recession, but still Great Britain kept his leader position.

Two thirds of cross-border M&As have involved developed countries, but the share of developing and transition savings, as targets of such transactions, had increased from 26% in 2007 to 31% in 2009 and 34.4% in 2010. European companies were the targets in about 42% of

cross-border M&As in the peak year 2007, their share decreasing thereafter up to 35% in 2010. As purchasers, in 2007 the share of European bidders was 44,4% in the total cross-border volume and it fell to 34,6% in 2010 (UNCTAD 2010:4).

If we look at the EU share in the global cross-border sales, we can observe that the share declined from 52% in 2007 to 47% in 2010 (we mention that the data for 2010 covers only the first five months) and the share of purchases declined from 53% in 2007 to 15% in 2010. USA improved its position both in terms of sales and purchases in the global cross-border activity and Japan improved its position especially regarding purchases. However, UE as entity maintained its global leader position in terms of sales and purchases and is still occupying a place at the forefront globally.

Table no 1. The evolution of UE share in the total volume of cross-border mergers and acquisitions, compared to USA and Japan (in billions of dollars and %)

Region/Economy	Net sales				Net purchases			
	2007	2008	2009	2010	2007	2008	2009	2010
World	1022,7	706,5	249,7	125,2	1022,7	706,5	249,7	125,2
EU								
Value	527,7	251,1	116,2	58,8	537,8	306,7	89,6	18,6
Share of total	52	36	47	47	53	43	36	15
USA								
Value	164,9	227,4	40,0	29,1	179,8	70,1	23,7	50,8
Share of total	16	32	16	23	18	10	10	41
Japan								
Value	16,5	9,2	-5,7	2,5	30,3	56,3	17,4	11,2
Share of total	2	1	...	2	3	8	7	9

Source: UNCTAD Statistics and own calculations:

http://www.unctad.org/sections/dite_dir/docs/wir2010_anxtab_9.pdf;

http://www.unctad.org/sections/dite_dir/docs/wir2010_anxtab_10.pdf;

Regarding sectorial distribution of European cross-border activity, the impact of the crisis across sectors resulted in a shift in their relative weight in the total value of M&As. The manufacturing industry was the most affected, but the decline was felt also by the primary sector and services (financial services or business services, have recorded a sharper decline) (UNCTAD 2010a: 11).

Despite these adverse evolutions in 2008 and 2009, in the first half of 2010, on the cross-border merger and acquisitions market that involved European companies was outlined a revival of operations and a restart of an upward trend. Thus, the value of cross-border M&As increased by 36% in first five months of 2010 (UNCTAD statistics provide data only until May 2010), compared to the same period of the last year. This reflects the upward trend following the economic growth in the countries of target and acquirer companies, corporate profitability growth and share price growth.

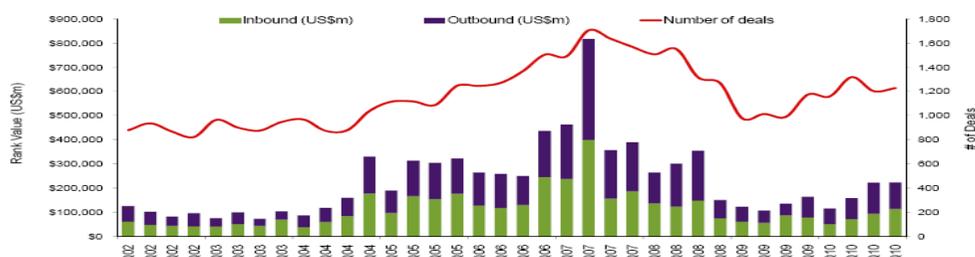


Figure no 1. Evolution of European cross-border mergers and acquisitions

Source: Thomson Reuters, *Mergers and Acquisitions Review, Financial Advisors, 2010: 9*, https://online.thomsonreuters.com/DealsIntelligence/Content/Files/Global_MA_%20Financial_Review.pdf

If UNCTAD statistics provide for the moment data on M&A only for the first half of 2010 (from which general trends can be inferred), the Thomson Reuters company has published a report on merger and acquisition activity for the year 2010. Thus, according to the report drafted by Thomson Reuters company (2010: 9) the year 2010 marked an increase in merger and acquisition activity so that cross-border M&As involving European companies summed up \$716.1 billion, which represented a growth by 35.8% compared to 2009. After a slight decrease in the value of cross-border mergers and acquisitions during the first quarter of 2010, starting with the second quarter and particularly in the second half of 2010, the value of cross-border transactions began to significantly increase. This was due mainly to European corporations, whose acquisitions had increased compared to 2009 by 57.2% to \$388.1 billion.

Short and medium term prospects of cross-border merger and acquisition activity

After the worldwide economy has experienced a deep recession, since 2010 the economic recovery (reflected by the increased production and foreign trade) included most economies, while the EU along with other major economies of the world acted to restore the worldwide financial stability and economic growth. In this context, the prospects for merger and acquisition activity on short and medium term are optimistic, being reinforced by the favourable development recorded in 2010. UNCTAD estimates, in *World Investments Prospects Survey 2010-2012* (2010b: 4), indicate a medium-term optimism related to the business field. Restructuring in the field of industry and privatizing companies (it is expected a new round of privatization within the European countries with large public debt) that were saved during the worldwide turmoil will generate further opportunities in terms of cross-border mergers and acquisitions for corporations.

According to the latest forecast made by the International Monetary Fund, the recovery from recession in Europe continues to make headway but is still modest. However, if the developed countries in Europe record a smaller growth, for 2011 and 2012 being projected increases by 1.7% respectively 1.9%, the emerging states in Europe present a more accelerated growth by 3.7% in 2011 and 4% in 2012 (IMF 2011: 67). Taking into account this scenario, we believe that 2011 will reflect a more dynamic evolution of merger and acquisition activity in Europe and, thus, a continuation of the upward trend started in 2010. This will be encouraged by the fact that the financial situation of corporations has a tendency to improve (corporate profits began to grow), the stock market has increased compared to 2009 and corporate and industrial restructuring is creating new opportunities for acquisitions, especially for the corporations in the emerging countries. By the year 2009, if companies were facing great difficulty in financing M&As, since 2010, the demand for loans to finance external growth operations has increased, fueled by an attenuation of credit standards. The investigation conducted by the European Central Bank in January this year reflects the fact that financing M&As still had a positive impact on the

corporate loan demand, which reflects the desire of companies to resume expansion projects (ECB 2011:7).

In Europe is expected a growth of the operations performed by corporations located in developing countries that are increasingly eager to expand on developed markets. Within the European Union, although the economic recovery is still fragile and unevenly distributed among the Member States, yet this will encourage the corporations in developed countries to expand, in order to enhance the competitive position and access to new markets. Although the developed economies of Europe remain the place where most transactions related to M&As are carried out, there is an increase in the share of these transactions within the European transition economies. We notice a decrease in interest for developed countries concerning M&As and an increase in interest for companies located in transition economies. According to UNCTAD (2010b:12) the top destination regions for investments such as M&As are South-East Asia, the EU-15, North America, Latin America and the Caribbean region, the new EU-12 Member States, South-Eastern Europe and CIS.

Conclusions

The strong decline of cross-border M&A activity in Europe in 2008 and the highlight of the downward trend in 2009 were caused by the reduction of opportunities for companies to invest, as a consequence of restricting the access to financial resources internally (as a result of corporate profits decrease) and externally (due to the reduction of the available liquidity and the increase of funding cost). On the other hand, the market deterioration due to economic recession which practically affected all economies and the unfavourable economic prospects had adversely influenced the companies' predilection to invest. As a result of the global economic slowdown and the recession that affected most economies, the more difficult credit conditions, the sharp reduction of corporate profits and the stock market decline, many companies were forced to abandon their expansion plans and hence the merger or acquisition projects. However, due to the worldwide economic growth that was recorded, the recovery of financial markets, the corporate profit growth, the investment appetite for expansion, national and international development increased significantly since 2010, which was reflected in an increase European cross-border activity. In conclusion, under the continuous economic recovery of the European countries and the other worldwide economies, the recovery of financial markets and the growth of corporate profits, we shall witness an intensive cross-border M&A activity in Europe. The expansion engine of these operations seems to be represented by the emerging economies, whose companies will represent not only attractive targets but also acquirers eager to expand on developed markets.

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VISITOR AND EXHIBITOR CLUSTERS AT EASTERN-EUROPEAN AGRICULTURAL FAIRS

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There is no exact information concerning the economic effect of the agricultural exhibitions neither on national nor on international level. Some publications focus on the positive externalities of exhibitions, but the exhibition itself is a neglected topic. Although the fair is one of the most ancient marketing-tools; its role is still relatively high in the marketing mix of different economic sectors, even nowadays, in the Internet-age. One of these sectors is the agribusiness, where the exhibition is a place of business-to-business communication, Customer Relationship Management, and last, but not least an important Point Of Sale.

The aim of the present paper is to point out the importance of exhibitions through the assessment of their popularity. From this aim, we have derived the following objectives:

- To build a model concerning the relationships among the interested parties.*
- To asses the visitors of five Eastern-European exhibitions.*
- To asses the exhibitors of the same exhibitions.*
- To compare the opinion and expectance of the mentioned groups.*
- To test the model, based on the questionnaires' data.*
- To measure the radius of attraction by the attendees, as well as by exhibitors*

I have collected primary data through questionnaires and site visit, and also have obtained secondary data from printed and electronic documents.

In this paper, I present a model, which describes the relationships among the interested parties. The data was collected on four different exhibitions: Farmerexpo (Debrecen, Hungary) in 2005 and 2006, OMÉK (Budapest, Hungary) from 2005 and Polagra-Farm (Poznan, Poland) 2006.

Keywords: Exhibition, fair, visitors (attendees), exhibitors, radius of attraction, cluster analysis

1. Introduction

It is difficult to make a distinction between the concepts of “exhibition” and “fair”. Even though the two are not identical, they are used interchangeably in everyday language moreover the distinctions that can be made are not consistently marked in the relevant literature, either. Accordingly, in this study, I am not going to differentiate between these two concepts.

Fairs and exhibitions belong to the oldest marketing tools. Many authors deal with evaluation of these events, examining them from different viewpoints.

2. Literature review

2.1. Economic importance of the exhibitions

To introduce the importance of the topic, I present the exhibitions held in Hungary. Table 1 shows the events registered by the Hungarian Chamber of Commerce and Industry. The different groups correspond to the extent the events are related to agriculture. Five groups of fairs can be distinguished, based on international practice:

- 1. Agriculture:* this group of fairs specializes in crop production and animal husbandry and the machinery connected to these activities (AGRO+MASHEXPO).
- 2. Food and Agriculture:* agriculture and food processing have a similar weight at the expos (AGRA SAVARIA, AGRORAAB, OMÉK).
- 3. Food:* exhibitions focused on food products and food processing (FOODAPEST).

4. *General and agriculture*: this group comprises fairs that are designed for a broader audience, however, in addition to consumer products, agriculture and food industry also play a particular role, (ZALAEGERSZEGI ŐSZI VÁSÁR).
5. *Non-agriculture*: not related to agriculture. (HUNGAROTHERM).

Table 1 – Exhibitions and fairs in Hungary 1998-2010

Type/Years	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Agriculture	23	18	22	15	10	16	14	11	4	8	9	4	3
Food + Agriculture	8	7	5	4	7	6	9	6	9	6	1	4	5
Food	5	12	10	12	10	6	14	12	12	7	11	13	5
General and agriculture	3	7	4	1	2	2	3	7	5	3	7	10	9
Non-agriculture	143	168	163	161	205	210	200	83	201	185	106	85	51
Altogether	182	212	204	193	234	240	240	119	231	209	134	116	73

Source: Forbát 1998, 2000, 2002-2007 and SZ.-Kovács 1999, 2001; 2008-2010 (own edition)

A continuous decrease can be seen in the number of exhibitions, what is also a consequence of the global economic crisis originating from 2008.

2.2. Importance of the exhibitions as marketing instruments

The importance of a fair or show-participation can be summarized as follows: an exhibition makes a good possibility for PR, CRM, and Direct Sale purposes, too, because an exhibition concentrates a market, making it similar to a classic free competition. “Notwithstanding the caliber of the topic, the most cited authors in the territory of marketing have no special attention concerning this type of communication and sale and the buyer-seller relationships” (Narayandas-Rangan, 2004). Kotler’s (1998) “classic” book introduces the motivations of the exhibitors as follows: “The participating sellers want to acquire diverse advantages, for example:

- To make new contracts
- To manage existing customer relations
- Introducing new products
- Meeting new buyers
- Further sales to the present consumer public
- The “school” the consumers with printed materials, videos and other audiovisual methods.”

A summarizing table of the literature between 1976 and 2009 was made concerning the frequency of participating objectives in case of exhibitors, including the above mentioned citation of Kotler (1998). The most salient objectives for exhibitors are the following:

Table 2 – The most salient functions of exhibitions in the literature

Order	Name of the function	Frequency
1	Contracting businesses / Making sales	18
2	Presentation of (new) products / Introduction of new products	16
3	Information sharing / Spreading information	15
4	CRM – Customer Relationship Management	13
5	Sales-promotion	11
6	B2B – Business to Business communication	10

7	Strengthening company image	10
8	Communication	10
9	Searching for wholesalers, retailers, and distributors	10
10	Collecting orders / Finding new customers	10

Source: Own editing – basis: 44 publications between 1976 and 2009*

2.3. Initial Research models

There were two models taking into consideration as blueprint for the research, parallel to the starting objectives. These were the model of *Spiropoulos et al. (2006)* and *Getz (2007) et al.*

The model of *Spiropoulos et al. (2006)* includes six major event stakeholder groups. These are the “Host organization,” the “Host community,” the “Co-workers” and the “Event sponsors,” the “Media,” and the “Participants and spectators” (See Figure 1).

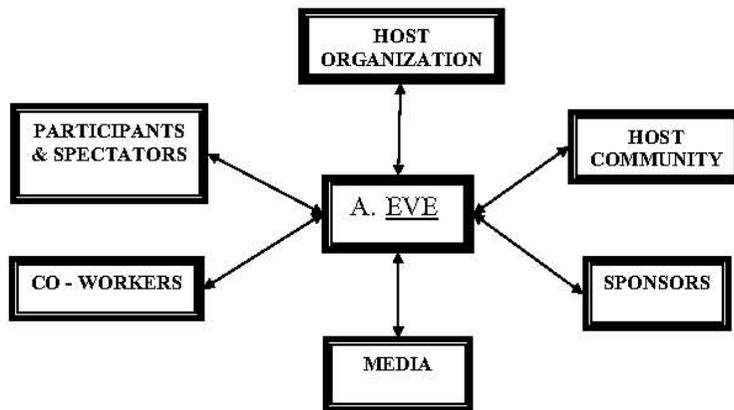


Figure 1 - The relation of stakeholders to events.

Source: *Spiropoulos et al., 2006.* (* “A. EVE” stands for “A.ctual EVEnt”)

Getz (2007) and his colleagues summarize the major stakeholder roles similarly to six groups, but different ones, as we can see in Figure 2.



Figure 2 – Major stakeholder roles

Source: *Getz et al. 2007.*

Based on the previous described models, a starting model was established, where the Organizers and Potential Sellers are on the Exhibitors' side, while the Potential Buyers, Expert companies, Individual experts, Future experts and Laymen represent the Visitors' (or Attendees') side (Figure 3).

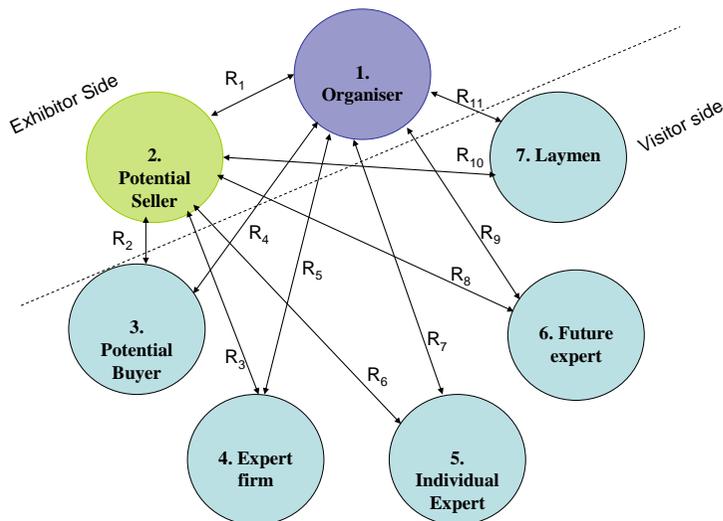


Figure 3 - Network of relations in the exhibition business

Source: own research *(R – Relationship)

The organizers comprise all the companies that play a central role in the organization of the fair. The Potential sellers are the companies that offer their products and services on the stands and, in return, pay the organizers for the use of stands. The term Potential buyer refers to visitors who are in a decision-making position in their (own) firm, planning and researching purchase possibilities. Expert firms include consulting companies, market research firms and professional associations (e.g. Economic Chambers). By Individual expert was meant visitors who gain (total or part of) their income from agriculture or agribusiness. The Future experts are university / secondary-school students or people who intend to start their own agribusiness or agricultural company. Laymen include non-expert visitors who simply seek entertainment at the fair (often family members who belong to the previous groups).

3. Materials and Methods

3.1. The observed fairs

Farmerexpo

From the very first moment (1992), FARMER-EXPO has consciously endeavoured to create opportunities for widening relations, deepening partnerships, supporting agribusiness sector. In accordance with the description above Farmerexpo provides a forum for all the agribusiness employed, and also for the domestic or foreign companies connected to the agricultural sector to introduce their products and services.

The professional programme of the exhibition has been widening year by year. Among the programmes there are professional conferences, forums for agricultural experts to collect new, important knowledge, the latest research results and other practical, useful experiences.

The show had been developing dynamically - taking both the net exhibition area and the number of exhibitors into consideration - until 1999, when an other exhibition organizing company got interested in Farmer-Expo.

The professional programmes provide various subjects from business meetings through plant breeding symposiums to agricultural political forums. The Hungarian Animal Breeders' Association acknowledges FARMER-EXPO as its official live-stock exhibition. Since 1994 - when as first member of the live-stock exhibition the pig appeared - the organizers has consciously broadened the live-stock exhibition year by year. Today 7 species of animals are shown at the exhibition - pork, horse, poultry, cattle, sheep, goat and rabbit. (I1)

OMÉK

The first Hungarian pedigree animal breeding exhibition was organized by István Széchenyi (Significant historic politician in Hungary), in 1829. The initiative of Széchenyi belongs in historical view to the oldest animal exhibitions, such as "Royal Show" in England, or the exhibition in Bern in 1804. Miklós Szabó reported over 53 rural exhibitions between 1867 and 1909. After the World War I. in 1921 participated Minister of Agriculture Nagyatádi Szabó István and Minister President Teleki Pál. After the World War II the first "bigger" international exhibition was located at the area of agricultural exhibitions in 1971: the I. Hunting World Expo. The OMÉK 1990 was represented by numerous participants of research and educational institutions [13].

"OMÉK the International Exhibition of Agriculture and Food is the oldest and largest farming exhibition in Hungary. The history of OMÉK begins with the 1896 Millennial Exposition in Budapest when Hungary celebrated its first thousand years. In 2005 will witness the 74th time this event that welcomes both representatives from the field and the general public as well. It will also see the historic first time the exhibition is being held within the European Union.

OMÉK's role has always been twofold: one, to give an account of where the sector has gone in the previous five years and of what has been achieved; and, two, to set a course for the coming years and outline the tasks that lie ahead in terms of growth and progress. With OMÉK 2005, this dual role has become all the more important in the light of our accession to the European Union: a report must be made on our experience of little more than a year as an EU member-state, one which discusses EU requirements and options for farming and the regions as well as evidence of suitability for EU membership." (I2)

Hódmezőgazda

The „Alföldi Állattenyésztési Napok” Exhibition and Fair became the most significant professional meeting of the Hungarian agriculture. It is organized by the Hód-Mezőgazda Zrt, with the full support of the Hungarian Animal Breeding Association. Since 2005 it has been opened towards the crop production too.

This corporation created the culture of animal breeding shows, whereas the leading animal breeding countries acted as a blueprint. It is connected with impressive, Hungarian-type classic buildings, with the largest number of attendees in the rural Hungary. There are six species in focus: horse, cattle, pork, sheep, goat and poultry. (I3)

Polagra

Poznań International Fair (MTP) was established in 1921. It is one of the trade show organizers with the longest history. The 1st Poznań Trade Fair, a domestic trade show, was organized between 28 May and 5 June 1921 at the initiative of Poznań merchants. In 1927 MTP joins UFI, the Global Association of the Exhibition Industry. In 1929 - General Domestic Exhibition (PWK) was an overview of the economic and cultural achievements of Poland. The exhibitions, organized on a space of 650,000 square metres, attracted 4.5 million visitors. In the 1930s the Poznań International Fair flourished and was ranked the fourth European organizer of international trade shows. In the late 1940s, the trade grounds, which were badly destroyed

during the Second World War, were rebuilt. In the following years the Poznań International Fair developed its exhibition programme and gradually added new exhibitions and trade shows to the programme. Old exhibition halls were rebuilt and expanded and many new halls as well as other facilities were built.

Presently the Poznań International Fair organizes over 60 events every year – different trade shows prepared for over 100 sectors of the economy. Every year it attracts over 300,000 visitors and more than 11,500 exhibitors.

Polagra Farm was a complex agricultural exhibition until 2007, including the machinery, buildings, animal husbandry and the crop production, organized yearly with its complementary: the Polagra Food. Nowadays the Polagra brand is divided for three exhibitions: Food, Tech and Premiery. (14)

3.2. Sampling and statistical methods

The research methodology was determined by the following preconditions, which had to be met:

- a large and representative sample needs to be collected
- close-ended questions need to be complemented by open-ended questions
- qualitative and quantitative evaluation methods need to be combined.

The most appropriate research instrument was the use of questionnaires (comprising a series of case studies), as is shown by the following authors: *Bryman (2004)*, *Kozak (2006)* and *Malhotra (2005 and 2008)*. *Malhotra (2008)* states, that “the questionnaire is a structured method of data collection, which consists of a series of written or oral questions for which the respondents provide answers”.

The size of the samples and the total number of visitors and exhibitors are shown in the following table:

Table 3 – Questionnaires collected at the sample fairs

	Number of exhibitors	Number of questionnaires collected from exhibitors	Number of visitors	Number of questionnaires collected from visitors
Farmerexpo '05	207	89	24 602	810
Farmerexpo '06	304	99	25 116	800
OMÉK '05	604	97	130 000	746
Polagra '06	743	86	70 315	421
Hódmezőgazda '10	420	52	50 000	405
Collected altogether:	-	423	-	3 182
Evaluated:	-	416	-	3 159

Source: Own research

The two (attendee and exhibitor) databases were evaluated by basic descriptive statistical analyses what made a profiling of the average attendee and exhibitor possible, but were also undertaken a tow-step cluster analysis.

4. Results and Discussion

4.1. Average attendee profile

As a result of profiling the “average visitor or attendee”, the following general picture emerged of the typical attendee, based on the most frequent categories and the most characteristic averages. The average visitor of Eastern-European fairs turned out to be:

- a middle aged man (42 years old),
- with a diploma or a degree,
- a member of a family of three or four people.

In addition, the following details emerged:

- if he has a farm, its size is larger than the country average,
- the primary goal of his visit is to gain knowledge, the secondary objective is entertainment,
- making contracts is not one of the main reasons he visits fairs,
- he has income from agriculture,
- he is not an animal breeder.

After describing the average visitor, I now turn to the visitor profile of each fair.

Polagra is significantly different from the other fairs because:

- the attendees came from the longest distance (142 kms),
- the average level of discounts perceived by the visitors is the lowest here.

As for **OMÉK** :

- the visitors came from an average distance of 111 kms,
- the main goal of participation was entertainment,
- visitors had the highest expectations concerning the discounts offered by exhibitors,
- it was attended by the lowest number of visitors who have farms (33%)

In the case of **Farmerexpo**:

- the visitors came from the shortest average distance (65 and 72 kms),
- the visitors rated the fair as the worst in 2005 (at an average of 3.55 points on a scale of 1-5 points aimed at measuring visitors' satisfaction).

Finally, in the case of **Hódmezőgazda**:

- the proportion between the two sexes was the most balanced,
- the visitors had the lowest average age,
- it was the most highly appreciated of all the exhibitions (it received 4.54 points out of a maximum of 5)

4.2. Average exhibitor profile

The profile of the “average exhibitor” is described the same way as that of the “average visitor”. The average exhibitor of an Eastern-European agricultural fair:

- comes from a company's whose form is limited company (Ltd.),
- employs between 5 and 50 people,
- his typical activity is agricultural machinery trade,
- the representatives of the companies are middle-aged,
- the instruments most commonly used at the fair to attract customers are brochures, the presence of professional dealers and giving free advice,
- the customers' expectations about the fair are perceived by the exhibitors' to be one or more of the following items: trying products, watching demonstrations and shows. These perceived expectations do not, for the most part, correspond to the competitive advantages formulated by the exhibitors.
- As for the perceived economic efficiency of exhibitions, the majority of the exhibitors think that the investment incurred by the costs of an exhibition will only return profit on the long run.

While the average exhibitors' profile (see above) described general patterns, the profiles that are characteristic of the four fairs that were observed describe unique properties as well as the parameters of variance.

Polagra, is markedly different from all the other fairs with respect to visitors as well as exhibitors for the following reasons:

- exhibitors come to Polagra from a longer distance (the exhibitor radius of the fair is 363 kms), which is a consequence of the host country's size as well as the importance of agriculture,
- Polish exhibitors consider image building as their highest priority,
- only 28% of the exhibitors prepare special discounts for the fair, which is lower than the percentage of Hungarian exhibitors with special discounts,
- the lower number of companies with special discounts is balanced by the total number of discounts that were given at the fair, which exceeds the Hungarian numbers,
- the use of in-fair customer-attracting instruments is lower in Poznan,
- the companies here are, for the most part, represented by independent, intellectual free-lancers.

Characteristics of **OMÉK**:

- The exhibitor radius is the shortest (115 kms),
- this fair is rated lowest in terms of exhibitors' satisfaction (3.07 of the maximum 5), which is primarily due to the duration of the fair,
- however, the fair is rated highest in terms of the total number of contracted businesses / contacts made, which highlights the fact that satisfaction ratings are based, for the most part, on subjective opinion, and do not reflect the individual firms' interests and success at the fair),
- The use of in-fair customer-attracting instruments is the highest in Budapest.

Characteristics of **Farmerexpo**:

- In 2006 the number of potential business contracts was the highest: on average, 18 businesses were contracted by each exhibitor ,
- the exhibiting firms here are mostly represented by people at the highest management level, which is not typical of the other fairs.

Hódmezőgazda has the following characteristics:

- most of the exhibitors represent animal breeding companies,
- the representatives have a diploma, half of them are top or medium level managers,
- exhibiting activity has decreased significantly over a five year period,
- based on the satisfaction ratings, this fair is the favourite among exhibitors,
- the number of contacts made at the fair is the lowest,
- the majority of Hódmezőgazda exhibitors think that the investment incurred by the cost of the fair will return profit.

4.3. Cluster Structure of Attendees

The profiling of fairs is a method whereby typical values are used to describe the characteristics of a particular phenomenon. Behind the typical values there are unique visitor and exhibitor groups which can be interesting for both groups of stakeholders. In order to explore these groups, the clustering method seems to be the most appropriate measure.

When describing various clustering methods, several authors (cf. e.g. *Sajtos-Mitev* 2008, and *Malhotra* 2008) suggest the subsequent application of a number of methods. Hierarchical and K-means clustering methods do not enable the combination of different – nominal, ordinal and metric – variables without previous standardization. Since in this case different variables have to be combined, *Sajtos-Mitev* (2008) offers a two-step clustering method as a novel approach. A

further advantage of this method is that it determines the optimal number of clusters. The variables incorporated in the cluster analysis are as follows:

a) Categorical variables (nominal and ordinal):

- - the type of exhibitions attended,
- - maximal distance for a fair's visit,
- - primary goal of the visit,
- - secondary goal of the visit,
- - the fair's relatedness to agriculture,
- - type of relatedness,
- - the gender of the attendees,
- - the level of education of the attendees.

b) Metric variables:

- - the number of exhibitions visited on average per year,
- - distance between home and the fair in kilometres,
- - content level (on a 1-5 Likert-scale)
- - share of agriculture in the total income (percentages)
- - size of farm (cultivated area in hectares)
- - attendees' age (in years)

The analysis was performed using the Log-Likelihood distance measure, the Schwarz-Bayes clustering criterion and automatic cluster number determination.

The cluster analysis resulted in two groups, which were named **Laymen (Group 1)** and **Farmers (Group 2)**, these two groups correspond to the "Potential Buyer" group in the initial logical model.

Characteristic differences between the two clusters:

- The Farmers' average visiting radius is higher (105 kms as opposed to 65 kms in the case of Laymen).
- The share of agriculture in the total income of the family is higher in the case of the Farmers (53%) compared to the Laymen (1,3%).
- The Farmers' share is more than 90% with respect to the following variables: their auxiliary/complementary agricultural income, whether or not they are agricultural producers / employees of agribusiness firms.
- The average size of the farms owned by the Farmers (133has), is significantly higher than that owned by the Laymen (less than 1 hectare).
- The Farmers mainly visit agricultural fairs, Laymen visit other types of exhibitions.
- The willingness to travel is greater in the case of Farmers (77% of the Farmers are willing to travel more than 500 kms, while 75% of the Laymen are only willing to participate in local fairs)
- 60% of the Farmers marked "gaining knowledge" as the primary goal of visiting fairs; 65% marked "personal relationship management" and 70% marked "business". Most of the laymen marked "entertainment" as their primary goal of visiting fairs.
- Personal relationship management (65%) and business (70%) also rate high as the Farmer's secondary goals of visiting fairs..
- 64.5 % of the Farmers are men ; women comprise only 38% of this group.

As a result of the cluster analysis, the groups labelled "Experts" , "Future experts" and "Representatives of expert firms" had to be eliminated,. This suggests that exhibiting firms should consider using a more careful pre-selection process of the visitors, since, as the above

findings show, the number of Laymen who visit fairs is high, these groups, however, could be more effectively targeted via PR and image communication measures.

4.4. Cluster Structure of Exhibitors

I performed a similar, two-step analysis in the case of the exhibitor groups as well. The variables incorporated in the cluster analysis were the following:

a) Categorical variables (nominal and ordinal):

- - opinion about the financial efficiency of fairs,
- - company form,
- - main company activity,
- - number of employees,
- - business deals (finding a partner on the long run),
- - presence of special in-fair discounts.

b) Metric variables:

- - frequency of exhibition per year (number of occasions),
- - actual distance between the exhibition and the company headquarters,
- - importance of PR contacts (on a 1 to 5 Likert-type scale),
- - importance of personal contacts (on a 1 to 5 Likert-type scale),
- - importance of business contacts (on a 1 to 5 Likert-type scale),
- - importance of market research (on a 1 to 5 Likert-type scale),
- - satisfaction level (on a 1 to 5 Likert-type scale),
- - number of in-fair communication instruments used.

The methods / settings of the analysis were similar to those used in the course of analysing the visitor-database: Log-Likelihood distance measure, Schwarz-Bayes clustering criterion and automatic cluster number determination.

The clustering methods resulted in two clusters, these were named “Minor Companies” and “Major Companies”. The initial logical model assumed a homogenous exhibitor group with a variety of objectives depending on the attendee groups. However, this hypothesis was disproved because the number of attendee groups is lower than projected, moreover, the exhibitor side, which was presumed to be homogenous, turned out to be fragmented. The following list of features served as a basis for the categorization of the two groups:

- The Major Companies exhibit more often (they hold, on average, 4.79 exhibitions per year compared to 3.72 exhibitions per year in the case of Minor ones)
- The representatives of Major Companies came from longer distances (on average, from 190 kms, while those of Minor ones came from an average distance of 166 kms).
- The satisfaction level of Major firms turned out to be higher on average (3.71 vs. 3.43)
- The number of employees was lower in the case of the Minor companies (lower than 200)
- The Minor companies’ typical business activity involved trading agricultural machinery, while the Major companies’ activity was not so closely related to agriculture.

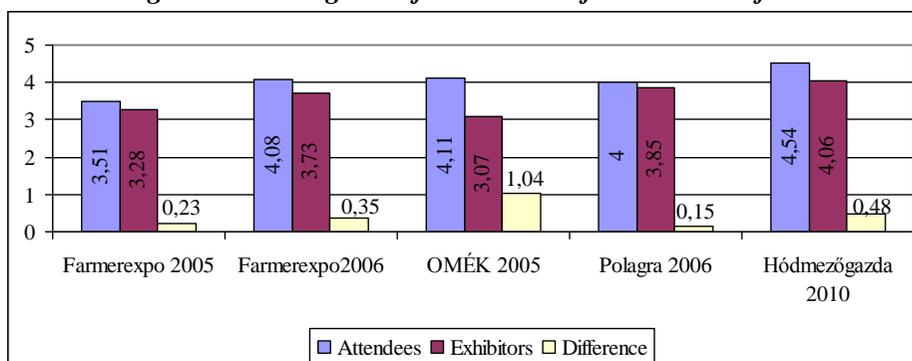
The Major companies differ from the Minor ones along the following parameters: (I) they are bigger in size, (II) they participate in exhibitions more frequently, (III) their representatives travel longer distances to the venue of the exhibition, (IV), they have a higher opinion of PR as a marketing instrument.

The Minor companies are less professional, however, they offer a higher number of special discounts not only at fairs but also in the course of their regular business activity, which is also characterized by regionalism.

4.5. Synthesis of the results with respect to visitors and Exhibitors

There are several correspondences between the questionnaires filled out by the visitors and the exhibitors, the analysis of these enables us to compare the opinion of the different groups of stakeholders. One of the most important correspondences is the average satisfaction level (Figure 6).

Figure 4 – Average satisfaction level of the observed fairs



Source: Own research

Farmerexpo 2005 was held at an unusual date (in spring instead of summer), which caused a low level of average satisfaction level. The expo was held on its usual date of August 20th a year later, which regained the favourable opinion of the stakeholders. The opinions concerning OMÉK are along two extremes: the exhibitors rate it as the lowest among all the expos that were observed, the visitors, however, rate it quite high. Hódmezőgazda, on the other hand, turned out to be popular with both interest groups.

Table 4 – Average radius of attraction of observed fairs

Designation	Attendees	Exhibitors	Difference
	Average	Average	
Farmerexpo '05	65,39	176,68	111,29
Farmerexpo '06	72,01	165,82	93,81
OMÉK '05	111,81	115,32	3,51
Polagra '06	142,75	363,75	221
Hódmezőgazda '10	108,95	182,13	73,18
Altogether:	93,58	194,95	101,37

Source: Own research (Significant differences are marked by different colour)

By far the largest radius of attraction with respect to both groups can be observed in the case of Polagra, which can be explained by the large size of the country. The Exhibitors in Hungary show no significant differences (at a level of 0.05). However, there are significant differences between the fairs held in Hungary with respect to attendees: Farmerexpo turns out to be a primarily local event, while the other Hungarian fairs have an average attraction radius of over 100 kms. (The significant differences are shown in Table 4 marked by different colours.) The radii are also shown in Figure 6, where a Central-European map makes the geographical distances more visible.

Attendees:
 Debrecen: 68 km
 Budapest: 112 km
 Hódmezővásárhely: 109 km
 Poznan: 142 km

Exhibitors:
 Debrecen: 171 km
 Budapest: 115 km
 Hódmezővásárhely: 182 km
 Poznan: 363 km

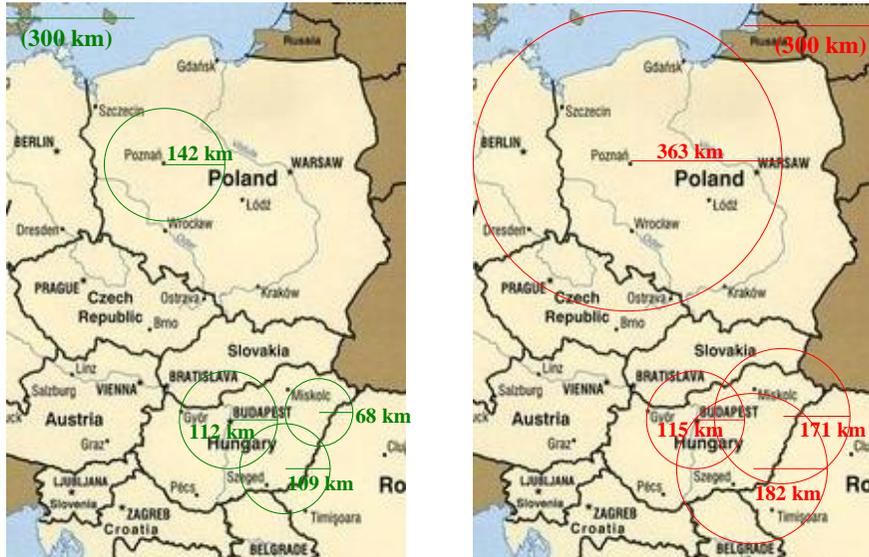


Figure 6 – Radius of attraction on map

The analysis of the correspondences enables us to assess the different perceptions held by exhibitors and visitors, respectively, and to understand the relations between the two stakeholder groups, as presented in Figure 6.

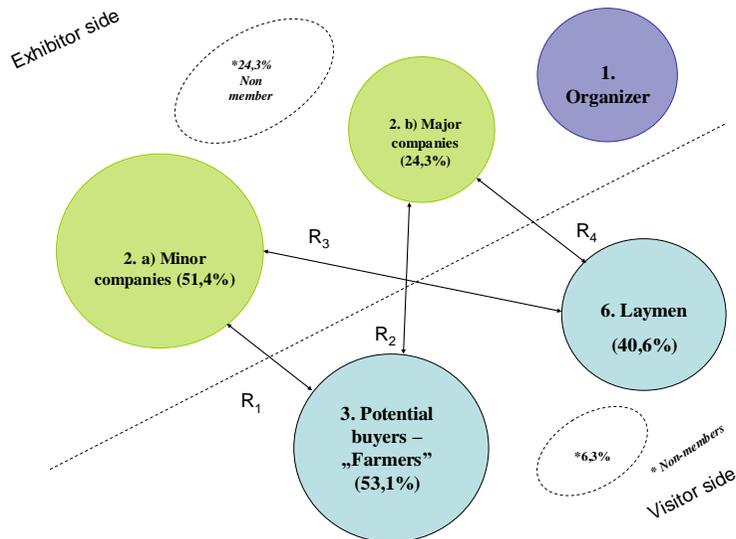


Figure 6 – The modified logical model of stakeholder groups at exhibitions yielded by cluster analysis

If we compare Figures 3 and 6, we can see the differences between the findings of the cluster analysis and our initial logical model in terms of the network of relations that exist between the visitor and exhibitor groups.

Table 5 shows the probabilities for the respective parties to find business partners. The chances of success depend on the proportion of clusters and the primary and secondary goals expressed by the parties concerned.

Table 5 – Relations between exhibitor and attendee clusters

Exhibitor cluster	Objective of exhibitor in the relation	Relation probability	Objective of attendee in the relation	Attendee (Visitor) cluster
Minor companies (51,4%)	Relationship management (CRM), Contracting business, PR	R1 = 27,3%	Gaining knowledge, Personal contact management, Contracting business	Potential buyers - Farmers (53,1%)
	Relationship management - (CRM), Contracting business, PR	R2 = 20,9%	Entertainment	Laymen (40,6%)
Major companies (24,3%)	Relationship management (CRM), Contracting business, PR	R3 = 12,9%	Gaining knowledge, Personal contact management, Contracting business	Potential buyers - Farmers (53,1%)
	Relation ship management - (CRM), Contracting business, PR	R4 = 9,9%	Entertainment	Laymen (40,6%)

As the table shows, a relationship (R1) is most likely to be formed between minor companies and farmers as potential buyers since their objectives meet and their proportions are the highest. The relationship between minor businesses and laymen (R2) is somewhat less likely to be formed, as the two groups have different goals in participating in fairs. Since the major companies are outnumbered, the number of contacts with the farmers (R3) may be limited, but the motivations behind participation are matched in this relationship. What laymen and major businesses (R4) have in common is that the former visit fairs for an opportunity to be entertained, major companies, on the other hand, provide entertainment as part of their PR activity.

By way of summarizing the factors that motivate the various parties concerned it can be established that the main objective of participation is relationship management, followed by the possibility of making business contracts, followed by entertainment/being entertained, a factor which is of primary importance to visitors.

In marketing communication fairs function as multifunctional instruments; their most important role is in general communication and relationship management, while their role in making business contracts is of secondary importance.

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SUB-SECTION: ECONOMIC STATISTICS

ROMANIA – PORTUGAL: A COMPARATIVE ANALYSIS OF THE TWO COUNTRIES' LABOUR MARKETS

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Our choice was justified by the fact that between the two countries exist some features that make them interesting to study from the employment point of view. Thus, both countries are Latin and this is why we consider they are comparable, because employment means people, more precisely mentalities and attitudes to work.

We considered that it is interesting to see how the labour market from the east Latin Europe has evolved, in a comparable, crucial period, with its counterpart from west Latin Europe. First of all, we would like to point out the fact that our intention is to analyse the periods which from the economic history point of view have influenced in a decisive manner the present evolution of the two countries.

The Portugal labour market is a subject of real scientific interest (we would like to mention that even Michael Porter was interested by this topic). Our paper tries to emphasize the common and different features of the two labour markets, in order to facilitate an experience sharing process on this topic.

To achieve the paper's objectives statistical and cluster analysis have been used. This is one of the best ways to capture the influence of determinant factors on labour market performance.

The degree of originality is given by the assumed objectives, namely studying some very up-to-date problems from an interconnected perspective (historical similarities, structural changes, labour market performance) and analyzing the Romanian situation compared to other EU countries, i.e. Portugal.

The main impact of the paper will be on the practical level through the model outcomes and conclusions. One of the objectives is to look for solutions to the problems identified and to persuade policy makers to give them a greater importance.

Our main contribution is represented by the fact that we have approached this topic from an economic and historical perspective, trying to find explanations for the present situation in the modern past of the two nations.

Key words: labour market, structural changes, education, cluster analysis, EU accession

JEL codes: J21, J24, J88

I. Introduction

Since the second half of 2008, European economies have been affected by a financial crisis of unprecedented severity which had an impact on public finances, people incomes, and not least on the labour markets. In all member states, gross domestic product decreased, and some of them have registered the largest loss of output from the last recession in the early 1970s (Arpaia and Curci 2010).

Across the European Union, employment rate decreased as a result of the economic crisis, ending in the first quarter of 2010 to 63.7%, a level close to that recorded in 2005, while the

unemployment rate was 10.2% the highest since the launch of the Lisbon Strategy (Leschke and Watt 2010).

Portugal is one of the developed countries of the European Union that has strongly experienced the global crisis consequences. With a budget deficit of 8.6% in 2010, by 5.6 percentage points higher than the Euro zone's limit of 3% and the highest unemployment rate in the last 30 years, approximately 11%, the economic recovery of Portugal is announced difficult and complicated. Regarding Romania, this was among the few EU countries which recorded a decrease in gross domestic product per capita of 1.3% in 2010 (Portugal experienced an increase by 1.3%). Although, in the same year, unemployment rate in Romania was below the European average of 9.6%, employment rate was much lower than other Member States, only 58.6%, compared with 66.3% in Portugal.

Despite the differences mentioned between the two Member States in terms of labour market performances, Portugal has many features in common with other countries recently accepted in the European Union such as Romania.

This is proved by many studies, one of them being the paper *Labour market transition in Portugal, Spain and Poland* (Teixeira 2001) in which the author has analysed the Portugal labour market before and after the moment of EU accession. The article encloses a small historical evolution of the labour market starting with the 1970s, after Salazar's dictatorial regime when trade unions were playing an insignificant role in this market and there were no right to strike. Between 1969 and 1974, in the post dictatorship period the labour market started to organise and claim basic rights.

What worth to be noticed is that in 1989 the labour market in Portugal was influenced by major changes in legislation, most of them regarding the labour contracts, especially the fix-term one. Coincidentally or not, after a comparable period from the moment when our country was accepted in the EU (2007), in 2011 Romanian labour market is dramatically transforming due to the new Labour Code, one of the main aria of change being also represented by the fix-term contracts considered by policy makers to be an useful mechanism to increase the employment rate.

After EU entry, Portuguese economy kept the attention of some famous economists like Michael Porter, who in his paper *Portuguese Competitiveness* (2002), emphasised the key role played by the innovative capacity as an input for the productivity (considered similar to competitiveness). In fact, he indicates the human resource as the main factor that can determine the prosperity of an economy. This idea is also reiterated when he approached in a more detailed manner the main factors which influence the productivity and the microeconomic business environment. It is interesting to notice that, in 1994 and even in 2002, over 15 years after the moment of adhesion to EU (1986) Portugal was recording a lack of skilled workforce (including the management).

This might be a cause of the fact that even if from 1995 until 2001 the Portuguese economy has recorded a solid economic growth it wasn't based on productivity. Reading these last statements, most Romanian economists could recognize a kind of pattern that could also be applied to our country. After EU accession (2007), Romanian economy continued to record economic growth based on consume, while the qualified workforce has massively emigrate to the western economies.

II. Positioning Romania and Portugal's labour markets in the European Union

To show the place of the two labour markets, the Romanian and Portuguese one, at the European level, a cluster analysis was performed. The following 9 indicators were included in the model:

- *employment in agriculture, industry and services* (% of total employment) – to capture labour market structure;
- *GDP per person employed* (constant 1990 PPP \$) – to assess labour productivity,

- *labour force with tertiary education* (% of total) – to evaluate the level of education of the labour force;

- *labour participation rate* (% of total population ages 15+), *long-term unemployment rate* (% of total unemployment), *youth unemployment rate* (% of total labour force ages 15-24), *unemployment rate* (% of total labour force) – to capture labour force participation in economic activity and the existence of some vulnerable categories.

The analysis was carried out for the year 2007 because we wanted that the results not to be affected by the financial crisis consequences and to accurately show the structural situation of the labour market in Romania and Portugal.

Cluster analysis or classification analysis is a method of data analysis that allows identification and classification of similar entities (objects or cases), depending on the characteristics they possess, highlighting the similarities of objects within a group (cluster) and differences from objects in other clusters.

Like factor analysis, cluster models study correlations of a whole set of variables without grouping them into categories such as: dependent variable and independent variables, like regression analysis does. If factor analysis aims to reduce the number of variables, cluster analysis is designed to classify objects into homogenous groups based on the characteristics analyzed so that objects in a group should be similar in terms of these variables, but different from other objects groups.

Non-hierarchical algorithms have been preferred for grouping objects into clusters whose characteristics were measured, a method commonly used in economic analysis being k-means.

K-means algorithms are based on the following considerations: if the number of groups is known a priori, objects will be associated with a group at a first step according to certain criteria. It then calculates averages for each group, and each object is associated with a group based on similarity with group averages. Group averages are again computed, and association process continues until objects no longer change their group.

Cluster analysis requires that variables be measured in comparable units and for eliminating the influence of measuring unit, variables were standardized so as to have average 0 and standard deviation 1.

$$x_{ij}^s = \frac{(x_{ij} - \bar{x}_{ij})}{\sigma}, \text{ where } \bar{x}_{ij} \text{ is the average and } \sigma \text{ standard deviation.} \quad (1)$$

Table no. 1 Cluster Membership

Case Number	Cluster	Distance	Italy	2	2.616
Austria	1	1.802	Latvia	1	1.938
Belgium	1	2.493	Lithuania	1	2.824
Bulgaria	2	1.440	Luxembourg	1	2.383
Cyprus	1	2.127	Malta	1	2.683
Czech Republic	2	2.375	Netherlands	1	3.759
Denmark	1	2.296	Poland	2	2.092
Estonia	1	2.297	Portugal	2	1.800
Finland	1	1.415	Romania	2	4.378
France	1	2.064	Slovak Republic	2	2.922
Germany	1	2.414	Slovenia	2	2.331
Greece	2	2.836	Spain	1	2.024

Case Number	Cluster	Distance	Italy	2	2.616
Hungary	2	1.541	Sweden	1	2.354
Ireland	1	1.815	United Kingdom	1	1.456

Source: Authors processing based on World Development Indicators & Global Development Finance

Running cluster analysis allowed grouping the 27 countries in two categories (Table no. 1): Cluster 1 (17 countries): Austria, Belgium, Cyprus, Denmark, Estonia, Finland, France, Germany, Ireland, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Spain, United Kingdom. These countries have common characteristics such as: high labour productivity, a high rate of participation in economic activity, skilled workforce and an economic structure predominantly based on employment in service sector (Table no. 2). Cluster 2 (10 countries): Bulgaria, Czech Republic, Greece, Hungary, Italy, Poland, Portugal, Romania, Slovak Republic, Slovenia. This group of countries have a labour market affected by the problem of unemployment, particularly long-term unemployment and unemployment among young people, while the workforce is employed mainly in primary and secondary sectors (Table no. 2).

Table no. 2 Final Cluster Centres

Variables	Cluster 1	Cluster 2
Employment in agriculture (% of total employment)	-0.382	0.649
Employment in industry (% of total employment)	-0.458	0.779
Employment in services (% of total employment)	0.530	-0.902
GDP per person employed (constant 1990 PPP \$)	0.487	-0.829
Labour force with tertiary education (% of total)	0.385	-0.641
Labour participation rate, total (% of total population ages 15+)	0.328	-0.557
Long-term unemployment (% of total unemployment)	-0.600	0.781
Unemployment, youth total (% of total labour force ages 15-24)	-0.360	0.613
Unemployment, total (% of total labour force)	-0.323	0.550

Source: Authors processing based on World Development Indicators & Global Development Finance

III. Romania-Portugal, a comparative analysis

The cluster analysis results show that the characteristics of the Portuguese labour market are closer to those of emerging countries such as Romania, which means that the paths of their economies over time may be similar.

Thus, in 1986 when Portugal was accepted in the European Union, its gross domestic product per capita was little more than 50% of the other Member States average. The EU entry advantages were capitalized and Portugal registered a substantial increase in gross domestic product per capita, with a growth rate of 6.5% over the first years after accession. This economic advance was supported by strong investment growth, with a rate of about 18% in 1987 (Table no. 3).

Table no. 3 Key Indicators of Portugal's economy before and after the EU entry

Portugal	GDP per capita (constant 2000 US\$)	GDP per person employed (constant 1990 PPP \$)	Population growth (annual %)	GDP per capita growth (annual %)	Gross fixed capital formation (annual % growth)
1980	6504	19916	1.081	3.465	8.536
1981	6552	20299	0.867	0.741	5.503
1982	6651	20738	0.612	1.512	2.257
1983	6611	19775	0.433	-0.604	-7.132
1984	6464	19656	0.346	-2.219	-17.386
1985	6631	20291	0.224	2.577	-3.547
1986	6906	21091	-0.007	4.148	10.871
1987	7359	21856	-0.167	6.559	17.997
1988	7930	22926	-0.260	7.769	14.833
1989	8467	23604	-0.311	6.773	3.657
1990	8838	23187	-0.413	4.381	7.607

Source: World Bank, World Development Indicators & Global Development Finance

Romanian economy has recorded a similar trend as Portugal a few years before joining the European Union and in the first two years after this event. Thus, in 2007 our country's gross domestic product accounted for 42% of the EU average, an average reduced by the previous enlargements. Catching rate was high. In 2006 GDP per capita recorded a growth rate of over 8% and in the first year after the EU entry of more than 9.5%. In 2007, investment growth rate reached a record level of 30%. But Romania still has very low labour productivity, less than half the labour productivity of Portugal in the 80s. This structural problem is accompanied by demographic issues, i.e. the population maintained a negative trend in the last decade (Table no. 4).

Table no. 4 Key Indicators of Romanian economy before and after the EU entry

Romania	GDP per capita (constant 2000 US\$)	GDP per person employed (constant 1990 PPP \$)	Population growth (annual %)	GDP per capita growth (annual %)	Gross fixed capital formation (annual % growth)
1999	1616	6202	-0.200	-1.002	-4.835
2000	1651	6182	-0.067	2.168	5.494
2001	1770	6584	-1.395	7.185	9.147
2002	1888	7830	-1.497	6.685	8.306
2003	1992	8245	-0.281	5.496	9.200
2004	2165	9096	-0.263	8.686	10.000
2005	2260	9620	-0.233	4.416	2.601

2006	2444	10306	-0.216	8.133	9.623
2007	2596	10902	-0.189	6.201	30.300
2008	2845	11644	-0.154	9.595	19.300
2009	2607	-	-0.145	-8.367	-11.178

Source: World Bank, World Development Indicators & Global Development Finance

The similarities between the two countries are very evident when their labour markets are analyzed in a comparative manner during the periods close to the accession moment. Thus, participation in economic activity was around 60%, and the main problems of both countries recorded high rates of long-term unemployment and youth unemployment (Fig. no. 1).

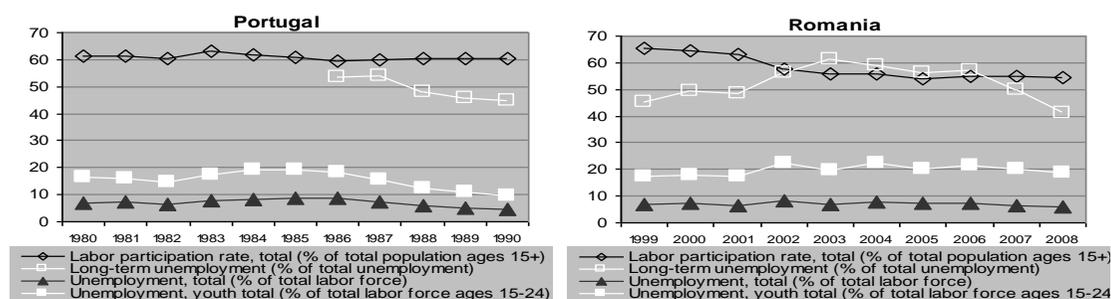


Fig. no. 1 Portugal and Romania's labour market situation

Source: Authors processing based on World Development Indicators & Global Development Finance

The two labour markets are quite similar in terms of labour market structure, Portugal being characterised for a long period by a high rate of population occupied in agriculture and industry, only a small part working in the services area (Fig. no. 2).

Even today, Romania has a different labour market structure compared to the European model, recording a large number of people employed in agricultural activities.

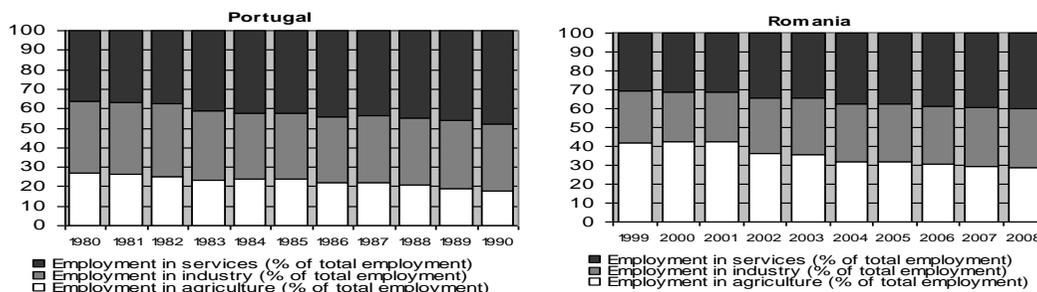


Fig. no. 2 Portugal and Romania's employment structure

Source: Authors processing based on World Development Indicators & Global Development Finance

VI. Conclusions

From this paper we can see that the Portugal's experience can be very useful to our country, due to the similitude and why not, to some contrasts. We tried to choose comparable periods from the historical point of view, when the two economies achieved critical milestones in their evolutions.

The economic background of the two countries has been dramatically influenced by their authoritarian political regimes (Salazar and Ceausescu), followed by transition processes to the market economy, and with a lag of 21 years, they joined to EU.

The both economies faced and are still recording problems generated by the low productivity and lack of skilled workforce.

Thus, the evolutions of the Latin extremes of the EU are quite similar, and we can consider that is mostly due to the features of their people. We have seen how they behave in the modern economical history and it will be interesting to watch how the labour markets from these countries will evolve after the current economic crisis, but this generous issue will be the subject of a future paper.

Acknowledgments

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EVALUATING TEACHING PERFORMANCE. FROM THEORY TO PRACTICE USING STATISTICAL TOOLS

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The teaching performance is influenced firstly by the quality of the educational system. The universities are trying to raise the expectations regarding the methods used for evaluating the teaching quality. In order for the results to be as much as credible the evaluation must defer to the existing theory and to follow the standardized procedures, starting from some basic principles. The most used framework is represented by the 3P model which contains three parts: 1. The input (factors that come under the students and the professor) 2. The learning process (activities focused on learning, teaching methods, practical ability, individual study) 3. The outcome (the output of the learning process). This study presents some results of a questionnaire based on the existing economic theory and applied to a sample of master business students from Romania. The students were asked to give grades from 1 to 5 to several aspects related to the educational process. These aspects took into consideration the following: if the didactic activity was interesting for the students/ the relationship between the objectives of the course and the activity evolved/ the clarity of the presentations/ the degree of students' participation required by the teacher/ the methods and materials used/ the availability of the teacher. The average grade is 4.39, indicating a very high level of satisfaction, taking into account that the grades ranged from 1 to 5. For 50% of the students, the average grade was below 4.53, while for the other half it was above the specified value. But one has to see the value returned for the majority of the students. The mode equals 5, meaning that most of the students involved in the analyzed programme are extremely satisfied with the quality of the educational process. With a significance value $\text{Sig.} = 0.004 < 0.01$, we can state that there is correlation between the level of satisfaction expressed by the average grade and the number of classes missed by a student, at a confidence of 99%. The value of the Pearson coefficient is -0.213, which shows the existence of a weak reverse connection.

Keywords: higher education, teaching quality

JEL classification: I21, I23

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I. Introduction

Quality of the higher level educational system is very important in Romania now-a-days. The liberalization of the educational market has increased competition, allowing students to have choice at all tertiary educational levels. This implies that universities have to come up with

interesting study programs, which take into consideration the requests of the labor market. The goal is to make specialists that do not only have a diploma, but can also find a job with that diploma. In this way, the study of the educational process's quality has gained more and more importance. Falling under this evolution, the research in this article assesses the quality of a master program in one of the Romanian universities.

II. Overview

The most important part of the educational quality is learning performance. Learning performance has two major impact factors: the teaching and the learning methods. The most used framework of these correlations is represented by the 3P model (Biggs, 1999) which contains three parts:

1. *The input*. Refers to the factors that come under the students (their knowledge's in their field of interest, its interest for the domain and their aptitudes for learning) and factors that come under the professor (the teaching purpose, the professor's performance, the class environment).
2. *The learning process* (allows for activities focused on learning, the teaching methods, the practical ability of the teaching knowledge, individual study on the gain knowledge).
3. *The outcome* represents the output of the learning process, likeness the knowledge gathered by the students (both quantitative as qualitative).

Based on a pilot study and a quantitative study over a sample of 1278 students from the business field, Nguyen and Nguyen (2010, p.307-308) are testing five hypotheses concerning the mechanisms that determine the learning achievement:

1. Learning motivation will have a positive impact on learning performance.
2. Instructor capability will have a positive impact on learning motivation.
3. Instructor capability will have a positive impact on learning performance.
4. The impact of instructor capability on learning motivation will be stronger for students who have higher levels of personal development competitiveness than that of students who have lower levels of personal development competitiveness.
5. The impact of instructor capability on learning performance will be stronger for students who have higher levels personal development competitiveness than that of students who have lower levels of personal development competitiveness.

The statistical outcomes validate the formulated assumptions and reveal a moderated impact of the professor's abilities over the learning motivation and the learning achievement. Similarly to the empirical studies over the same subject (Mare et al., 2011; Tharenou, 2001), Nguyen and Nguyen (2010) prove that the learning motivation has a positive effect over the learning achievement. The professors' ability and the learning motivation influence in proportion of 75% the achievement of learning (the used value is the variance analysis).

The caretakers of the university development according to the „Bologna Process” have agreed that the responsibility of assuring the quality in the higher education system revives first to each university and to its own system of assuring the quality (Berlin Communique, 2003) in accordance to the principle of the university autonomy. The quality assurance in higher education institutions (HEIs) must be in accordance with the legal national frame and includes the evaluation of the universities and of the study programmes through internal standards (including the students participation), external evaluation (ministerial commissions) and the transparent publishing of the results (Kettunen, 2010). For a correct and objective estimation there is the possibility of the use of cross-evaluation of degree programmes. A cross evaluation is defined by a set of 1) Specific aspects; 2) Followed goals; and 3) Strategic objectives. The cross-evaluation is an example of enhancement-led evaluation, which is programmed to assist the institution both

in improving its educational and other actions. The strength of the evaluation is in its capability to relate learning methods, educational processes, and innovative association among the degree programmes.

One of the main important points now at European level is the lifelong learning process. Increasing it has become a major objective in all the treaties and strategies of the European Union. Another important aspect very much discussed is the correlation between university programmes and the skills the labour market demands. Only with the condition of complying with this “demand” the lifelong learning process will improve. Based on the above mentioned issues, the goal of this research was to see the degree of satisfaction for students involved in the master programmes related to audit at the “Babes-Bolyai” University, Faculty of Economics and Business Administration, Cluj-Napoca, Romania.

III.Methodology

To evaluate the master program, a survey was conducted that dealt with all the important aspects of the educational process – didactic activity, means and materials used during classes, teacher’s attitude, etc. For better understanding of the results, some features of the students were asked. In the end, the students were required to state the most important positive and negative aspects of the program and to make some suggestions to help improving the quality. In the first part of the questionnaire, students were asked to give grades from 1 (meaning the worst impression) to 5 (the best impression) to different aspects of the education process. A new variable was computed that expresses for each individual the average grade at a macro level. Afterwards, different methods of inferential statistics and data analysis were used to get the results. For the study of the relationship between two quantitative variables, the correlation approach was used. The correlation coefficient shows whether a connection exists and of what type.

IV.Results

The students were asked to give grades from 1 to 5 to several aspects related to the educational process. These aspects took into consideration the following:

- if the didactic activity was interesting for the students,
- the relationship between the objectives of course and the activity evolved,
- the clarity of the presentations,
- the degree of students’ participation required by the teacher,
- the methods and materials used,
- the availability of the teacher, and so on.

In the end, for an introductory analysis, the grades given by each respondent were put together. Moreover, for each individual an average grade was computed. This value is considered to render an overall opinion upon the quality of the master program.

As can be seen in Table 1, 190 students were involved in the study. Actually, the questionnaire was applied to 200 master students, but 10 of them were eliminated due to missing answers.

The average of the variable is 4.39, indicating a very high level of satisfaction, taking into account that the grades ranged from 1 to 5. For 50% of the students, the average grade was below 4.53, while for the other half it was above the specified value. But one has to see the value returned for the majority of the students. The mode equals 5, meaning that most of the students involved in the analyzed program are extremely satisfied with the quality of the educational process.

Table 1. Descriptive statistics of the average grade given by each student.

N	Valid	190
	Missing	0
Mean		4.3944
Median		4.5333
Mode		5.0000
Std. Deviation		0.5242
Minimum		2.6000
Maximum		5.0000
Percentiles	25	4.0500
	50	4.5333
	75	4.8000

Source: authors' calculus.

The average minimum value returned by the analysis is 2.6, while the maximum is, of course, 5. For a better picture of the distribution, the quartile values were computed. They show that for 75% of the respondents, the minimum average grade given to the aspects analyzed was 4.05. So, on average, almost all of the respondents are very or extremely satisfied with the master program. The distribution in relation to the percentile values is also shown in the box plot presented in figure 1.

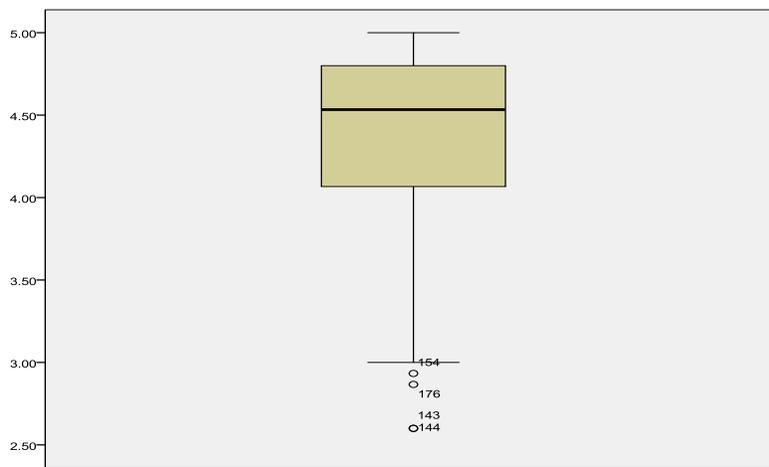


Figure 1. Boxplot of the average grade given by each master student.

Source: authors' calculus.

The boxplot is a very useful figure in such analysis as it emphasizes the grouping of the cases based on the median, the 1st and the 3rd quartile value. In addition, it also displays cases considered outliers. Out of the 190 respondents analyzed, 4 are considered to be outliers in the sense that they do not correspond to what is normal in the population. The four students have an average grade lower than 3 (which would be in between as attitude). Thus, only 4 students out of

190, representing 2%, are quite unsatisfied with the program they are involved in. The rest, 98% are very satisfied.

But for such variables, it is very important the representativeness of the average value and the degree of homogeneity of the distribution. The two aspects are assessed with the help of a single coefficient – the Pearson’s coefficient of variation, which is computed as the ration of the standard deviation to the mean. The value of 11.92% returned by the analysis, which is lower than 30%, clearly shows that mean of the average grade of each individual id representative for the students and that they are homogeneously distributed in respect to it.

But not all the students did come to all the courses. To see if there are any specificities, the relationship between the average grade and the number of classes skipped by a student was analyzed. The scatter plot of the distribution is presented below (figure 2). The correlation was tested with the Pearson coefficient.

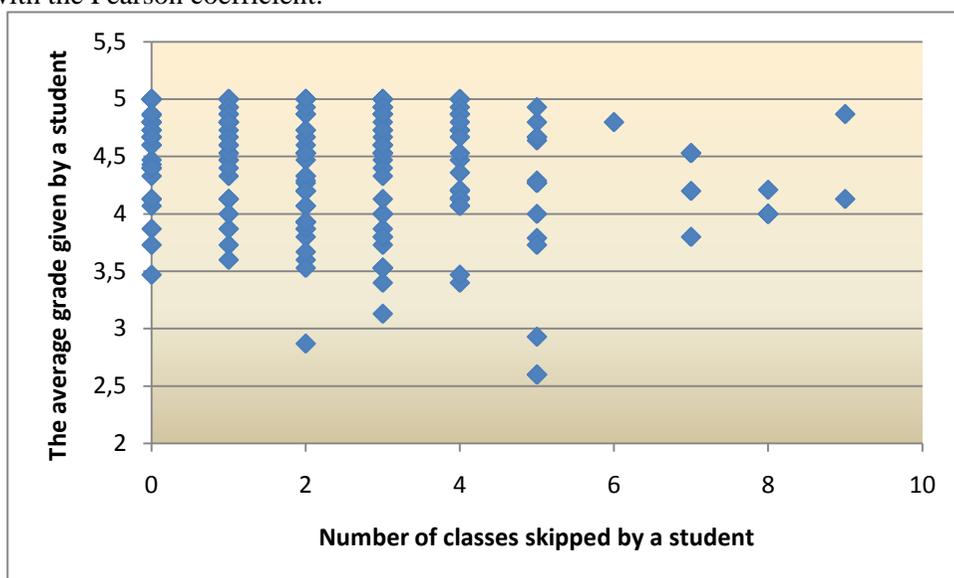


Figure 2. Scatter plot of the average grade and the number of classes skipped by each student.

Source authors' calculus.

Table 2. The correlation with the level of satisfaction

	Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.	
Interval by Interval	Pearson's R	-0.213	0.060	-2.943	0.004 ^c
N of Valid Cases	184				

Source: authors' calculus.

With a significance value Sig. = 0.004 < 0.01, we can state that there is correlation between the level of satisfaction expressed by the average grade and the number of classes missed by a student, at a confidence of 99%. The value of the Pearson coefficient is -0.213, which shows the

existence of a weak reverse connection. In other words, it is expected that students that missed more classes to have a worse opinion about the quality of the program.

V. Conclusions

The goal of this analysis was to emphasize patterns and expectations related to university programmes from the point of view of the lifelong learning concept. As emphasized in the results part, the Romanian university system is struggling to bring forth programmes that are requested on the market. Increasing the practical level and showing students the relevance of each course leads to a much higher degree of satisfaction among them. And, if students are satisfied, they will recommend the programme to other prospective students.

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AN INVESTIGATION OF LONGRUN RELATIONSHIP BETWEEN ECONOMIC GROWTH, INVESTMENT AND EXPORT IN ROMANIA

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The objective of this study was to estimate the long-run relationship between economic growth, investment and export in Romania using trimestrial data from the National Bank of Romania as well as National Statistical Institute. The econometric methodology employed was the Cointegration and Granger Causality test.

First, the stationarity properties of the data and the order of integration of the data were tested using the Augmented Dickey-Fuller (ADF) test. We found that the variables were non-stationary in levels, but stationary in first differences; that is, they are integrated of order one (I (1)). Since we used single equation model(s), the application of Johansen multivariate approach to cointegration was necessary to test for the long-run relationship among the variables. The result showed the existence of a single cointegration equation between the variables. The result of the Granger causality test shows a bidirectional relationship between investment and economic growth and also a bidirectional relationship between investment and exports but the result of the causation between export and growth was statistically insignificant.

Keywords: economic growth, investment, export, Romania, VECM model

JEL codes: E52, C32

I. Introduction

In contemporary economic literature, different points of view have been formulated regarding the economic growth. Considering the different points of view regarding the content of the economic growth, it can be defined as that process of increasing the dimensions of the economic results, determined by the combination and usage of the production factors and underlined throughout macro-economical indicators such as the gross domestic product, the national gross product and the national income in real terms (Samuelson and Nordhaus 2000: 632).

The study of the economic growth has old implications. The preoccupations for the study of economic growth have existed since the beginning of the classical school, represented by Adam Smith, David Ricardo and Thomas Malthus. In Malthus' conception, the balance is realized when the income decreases to a level where the work-force offer grows with a diminished rhythm, and the economy is at a stationary state. The classics omitted in their models the contribution of the technological progress to the growth of the production per capita (Socol 2006: 62).

The Keynesian and Neokeynesian models of economic growth consider that the economy is inherently unstable, the intervention of the state being necessary in order to achieve balance. These models propose the utilization of budget and monetary policies to stimulate the economic growth. The Neoclassic theory of economic growth considers that the economy is stable and tends towards a complete use. The Neoclassics start from micro-economy, from the preferences of the households, the companies production functions, the structures of the market, etc. The investments have a short term effect over the national income through the aggregated demand; their effects on the long run manifest themselves through the growth of the potential national income. On the long run, the technological modifications represent the main cause of economic growth, together with the capital investments and the new technologies (Angelescu 2006: 89).

The concept of economic growth on a long term was introduced by Solow and Swan in a macro-economic model that became a classic, by introducing into the models of growth accomplished by classic economists, Ramsey and Havelmomo, a relation which expresses the population growth and a condition regarding the efficient use of the labor force (Scarlat și Chirița: 60). From that moment, the theory of economic growth evolved rapidly as two generations of distinct models. The neoclassical model of Solow-Swan is based on the exogenous aspect of economic growth, sustaining the realization of a process of economic convergence between the countries. In his study, Solow starts from the following hypothesis: the capital is submitted to decreasing capacities; the countries which have at their disposal the same characteristics of demographic growth, technological progress and rate of investments, will have incomes which will converge towards the value present in the most developed country; the scale capacities are constant; the technological process is exogenous; the economy is perfectly competitive; the perfect mobility of the production factors (Marinaș 2010: 79-80).

The interest for the theory of economic growth reignited together with a research of Romer, giving birth to the second generation of economic growth models. Within those models, there are significant improvements, such as an attempt to explain aspects related to dates which had not been discussed in the neoclassical model, a more satisfactory explanation of the differences between the rates of economic growth in different countries, a central attention given to gathering of knowledge; an increased role given to the instruments of the macro-economical policies for the explanation of the growth process (Scarlat and Chirița: 60).

II. Models of economic growth – a short literature review

This paper presents the relationship between the economic growth, exports and investments in Romania. A series of empirical studies tested the correlation between the dynamics of the exports and the process of economic growth, as well as the possibilities of transfer of the effects resulted from the two variables. Pereira and Xu used for the identification of the causal relation between these, the concept of causality in the Granger sense. According to this model, the exports uphold the economic growth, the estimating of the growth variable being improved through the inclusion of the export variable delayed in time. In a similar manner, the growth variable constitutes a cause of the export variable, if the estimation of the export variable registers a reduction of the forecast error, by including the delayed growth variable (Marinaș 2010: 280).

Starting from the same concept of causality in the Granger sense, Omoke Philip Chimobi studies the relation between the economic growth, investments and export. The role of this model was that it determined a long term relation between the three variables. In estimating this relation the Johansen co-integration test was also used, based on which the conclusion was that there was no long term connection between the three variables. Regarding the Granger causality test, it was found that between the investments and the economic growth there exists a bi-directional relations of causality, which from a statistical point of view was insignificant, and it also resulted that there exists a bi-directional relationship between investments and export (Chimobi 2010: 215).

Ullah, Zaman, Farook and Javid have shown with the help of a VECM model showed that the extending of export leads to an economic growth. They also checked whether there is a uni-directional or bi-directional causality between the economic growth, exports, imports, real fix capital and the income per capita (Ullah and others 2009: 269-270).

Subasat showed that the exports constitute a source of economic convergence, the countries with a medium level of development and with an expansion of export, grow faster than those which are not oriented towards export. His fundamental objectives are to try to obtain control over the structural characteristics which determine “the orientation of export” in order to derive an

indicator for the promotion of export which captures only the effects of the policies, and then in order to attest if this indicator is or not essential for the economic growth (Sabasat 2002: 333).

An analysis of the relation between growth, investments and exports, was accomplished by Dritsakis as well . He studied the relation between the three variables for Romania and Bulgaria, with the help of auto-regressive VAR model. The results suggest the existence of a relation of co-integration between the three variables, as well as a positive impact of the exports and the investments on the real GDP (Dritsakis 2004: 1831).

Regarding the investments, the neoclassical theory suggests the importance of the stock capital increase for the countries that are at a low level of economic development. The influence over the economic growth will be for a medium amount of time, until the moment in which a level of stationary balance of the income will be achieved. The sources for the investments refer to the growth of the savings rate, as well as to the fluctuations of the direct foreign investments. In the case in which these direct foreign investments presuppose also transfers of technology, then the process of real convergence will be a sustainable one. For the new members of the European Union, the direct foreign investments have upheld the process of economic growth, two of the channels for the transmission being represented by investments and exports (Marinaş 2010: 280). Modern theories of economic growth underline the unlimited potential of the technological progress, in order to save all the production factors and to sustain the increasing capacities of the investments (Socol 2006: 62).

III. Methodology

In order to investigate the causality between the nominal GDP (LGDP), direct investments (LDI) and export (LEXP) we used trimestrial deseasonalized data in log for 2000:1 – 2010:4 collected from the Monthly Bulletins of the Romanian National Bank and the INSSE Tempo Online series available online on Romanian Statistical Institutes website. The VAR and VECM models have been largely used in macroeconomics, especially because the variables involved are endogenous and exogenous at the same time. It is known that VAR models are used for stationary data while VECM – for nonstationary ones. We investigated the stationarity of data, in order to establish whether a VAR or VECM is most suitable, then we studied the cointegration between the chosen variables as well as the Granger causality. We used the impulse response function as well as the variance decomposition in order to study the model’s goodness of fit.

IV. The model

First we investigated the stationarity of data. We used the Augmented Dickey Fuller test, including in the equation a constant and a linear trend. Following Canova, the choice of the lag length was established using Schwartz’s Info Criterion, as the AIC criterion has been proven to be inconsistent for more than 20 observations.

Table 1. ADF test for variables in level and first difference

	ADF test for variables in level		ADF test for the first difference of the variables	
	T statistic	Test critical values for 5% level	T statistic	Test critical values for 5% level
LGDP	-0.205027	-3.518090	-5.934518	-3.523623
LDI	-1.062859	-3.544284	-3.590803	-3.533083
LEXP	-2.626204	-3.520787	-5.001252	-3.523623

Source: Authors’ calculus

ADF test shows that variables in level are not stationary, but all of them are integrated of order 1, I(1), for a 5% level of confidence.

We next investigated the existence of a cointegration relationship between the chosen variables, using Johansen methodology. The Johansen cointegration without deterministic trend test was then conducted. The Unrestricted Cointegration Rank Test (Trace) as well as the Maximum Eigenvalue test indicated one cointegrating equation at 0,05 level for the model without deterministic trend.

Given the results, a VECM Vector Correction Model with 1 cointegrating equation was estimated. Restrictions were placed on the coefficients of each cointegrating relation as well as on the adjustment coefficients, using the normalized cointegrating coefficients and adjustment coefficients. The VEC Granger causality/block exogeneity Wald test showed that the variables with significant impact on the evolution of GDP were both chosen variables, direct investments as well as export.

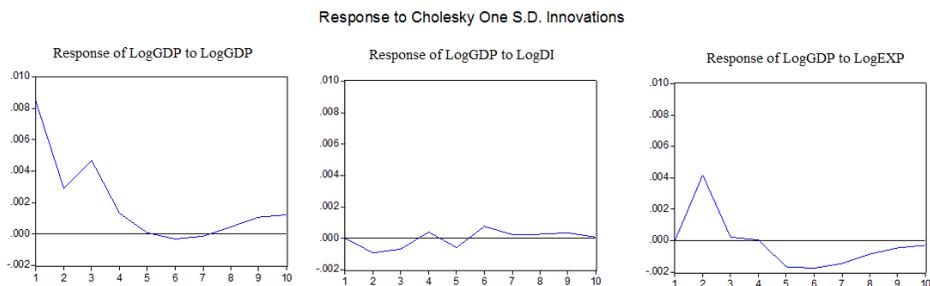
The cointegration relationship can be written as follows:

$$\text{LogGDP} = 0.163234 \text{ LogEXP} + 0.459997 \text{ LogDI}$$

and it reveals a positive correlation on long run between economic growth, exports and direct investments. A 10% increase in exports (in log) determines an increase of 1,6% of GDP in log. The result is consistent with the one of Marinaş. In his VECM model he found an elasticity of 18% of GDP at a increase of 1% of exports.

The VECM model is used in order to investigate the causal relationships between the chosen variables. We found that the model can be written as follows:

$$\Delta \text{LogGDP}_t = -0,29 \Delta \text{LogGDP}_{t-1} - 0,07 \Delta \text{LogDI}_{t-1} + 0,07 \Delta \text{LogEXP}_{t-1} - 0,11 (\text{LogGDP}_{t-1} - 0,08 \text{LogDI}_{t-1} + 0,07 \text{LogEXP}_{t-1} + 3,6)$$



Graph 1. Impulse response functions of LogGDP to a 1% impulse of LogGDP, LogDI and LogEXP

Source: Authors' calculus

Graph 2. Variance decomposition of LogGDP – percent of LogGDP variance due to LogGDP, LogDI and LogEXP

Source: Authors' calculus

We conducted the pairwise Granger causality test with 2 lags. Granger causality tests are defined as joint tests (F-tests) for the significance of the lagged values of the assumed exogenous variable. The estimation result indicated that we reject the null hypothesis for both LogDI and LogGDP and conclude that there exists bidirectional causality between investment and economic Growth at the 5% level of significance. There was statistical significant relationship found to

exist between export and economic growth. Also, with regards to the relationship between investment and export, the result showed that we reject the null hypothesis, indicating that there is bidirectional relationship existing between investment and export in Romania.

V. Conclusions and further implications

The implications of the result is that increase in investment will lead to production of more good which will cause growth in the economy in one hand; and on the other hand, economic growth will guarantee increase in investment. This increase in investment will find development projects such as electricity supply, good road network, good medical care and host of other projects being carried out in Romanian economy. The growth of a country's economy increase the per capita income and subsequently the capability of the citizens to save and reinvest in the economy; hence, a bidirectional causality.

Also Investment which was seen to cause growth will equally enhance export, bearing in mind that increase in export of goods and services will necessitate (cause) Investment in the Romanian economy. It is therefore strongly recommended that policies aimed at increasing the level of Investment be formulated in Romanian economy as a means of engendering economic growth and export which will flow back to as investments.

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AN OVERVIEW OF HUMAN RESOURCES IN SCIENCE AND TECHNOLOGY (HRST) FROM RESEARCH DEVELOPMENT AND INNOVATION (RDI) SECTOR DURING 1993-2009 IN ROMANIA

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The present paper present a study done on the Human Resources in Science and Technology (HRST) in Research Development and Innovation (RDI) sector in Romania during 1993-2009. This paper started from the elements defined in Canberra Manual based on the qualification and occupation. Labor force in this study refers to university level and technician level as skill from education. These definitions from Canberra Manual for HRST were used in the present paper in reference to all the researchers in Romania for different areas of research as engineering and technology sciences domains, natural and exact sciences, medical sciences, agricultural science, social sciences and humanities. After a short presentation of the US origin of the Human Resources in Science and Technology Management and the situation from Europe, the present paper are dealing with the area of the Human Resources in Science and Technology system from Romania, the sector of Research Development and Innovation. This study is focused on the employees by categories of the activities in research, development and innovation sector. We took into account the employees with different categories of graduation diploma which are working in the fields of research and development activities too. Samples data were took from Tempo online database from National Institute of Statistics from Romania, updated database in 21 of October in 2010. Data were took for simulations in December 2010. We try to do a simulation on the evolution of Human Resources in Science and Technology (HRST) in Research Development and Innovation (RDI) sector in Romania during this period (1993-2009) and we observed that real data fitting on a regression curve of sixth degree whose coefficients were defined during this study. This type of simulation can be good for future forecasting for Human Resources in Science and Technology in Research Development and Innovation (RDI) sector in Romania.

The present study is part of Doctoral Grant "Implications for innovation, research and development role in the development of Romania's economic competitiveness", during 2010 and 2013 and having Director: Prof. Dr. Alina Badulescu in Oradea University, Faculty of Economic Sciences.

Key words: *Human Resources; Statistical Simulation Methods; Employment; Higher Education and Research Institutions; Labor Force and Employment, Size, and Structure.*

JEL code : *O15, E24, I23, J21, J24.*

1. Introduction

From Canberra Manual, the fifth Frascati Manual, the demand for Human Resources for Science and Technology (HRST) as definition is based on two dimensions, qualification and occupation. The qualification axis tell us about supply of HRST the number of people who are currently or potentially available to work at certain level. (OECD, Canberra Manual, 1995)

The demand for HRST, the number of people who are actually required in S&T activities at a certain level, is related to the occupation dimension.

HRST are people who fulfill one or other of the following conditions: successfully completed education at the third level in an Science & Technology field of study; and not formally qualified

as above, but employed in a Science & Technology occupation where the above qualifications are normally required.

HRST can be split into two major categories. (OECD, Canberra Manual, 1995): University- level HRST and Technician-level HRST.

The split between those two is related to skill levels and thus mainly to education. In general, education at the third level begins at the age of 17 or 18 and lasts three or more years. Successful completion of either a first or a postgraduate university degree (or equivalent) is the main criterion for university level HRST, whereas an award lower than a first university degree is the criterion for technician-level HRST.

The International Standard Classification of Education (ISCED) is the classification both of levels of education and field of study.

ISCED levels of education. (OECD, Canberra Manual, 1995)

0 Education preceding the first level; **1** Education at the first level; **2** Education at the second level, first stage; **3** Education at the second level, second stage; **4** (Not attributed), **5** Education at the third level, first stage, of the type that leads to an award not equivalent to a first university degree; **6** Education at the third level, first stage, of the type that leads to a first university degree or equivalent; **7** Education at the third level, second stage, of the type that leads to a postgraduate university degree or equivalent; **8** (Not attributed); **9** Education not definable by level.

2. Literature review

The theories of Human Resources Management has the origin in United States of America (Brewster, 2004; Brewster, 1994). The management of Human Resources in particular has been heavily influenced by thinking in USA.

The impact of the globalization was influenced on the way that people are managed, particularly in Europe Union (Brewster, 2004; Brewster, 1994). In human resources management (HRM) in particular is the US model of HRM one that will inevitably be followed in Europe? Our understanding of management in general and human resources management in particular has been heavily influenced by thinking in the United States of America. This is perhaps not surprising from a country that has been for decades the largest economy in the world. HRM like many other aspects of management was originally conceptualized and developed in the United States of America. The study of personal management which was “partly a file clerk’s job, partly a housekeeping job , partly a social worker’s job and partly a fire-fighting to head of union trouble” (Drucker, 1989). The American’s theories about HRM would work anywhere in the world. “Relationships between the structural characteristics of work organizations and variables or organization context will be stable across societies“ (Hickson et. all, 1974). Their main findings from cases in the USA, Canada and then UK were that companies are subject to the same relationships in terms of size, dependence on parent group and technology irrespective of country. Hickson et. all offered a culture free context of organization structure (Hickson et. all, 1974). Kidger appreciated that grew in isolation from the world economy are having their approaches supersede by universally applicable techniques (Kidger, 1991).

Other models of Human Resources Management (HRM) are continually being developed. And the rhetoric at least of HRM has been spread to many other countries both in the theoretical discourse and within employing organizations. From the early days, there have been calls for comparative HRM, studying similarities and differences in management systems and the way people are managed in different countries (Brewster, 2004; Brewster, 1994; Redding, 1994).

The concept of Human Resources Management (HRM) has the origin in Europe (Brewster, 2004).

Whether the US derived visions of Human Resource Management (HRM) apply everywhere in the world is an important question for both theory and practice since following US prescription

in either area may be detrimental if theories are not transferable, for example, the need for a contingent approach encompass cultural, sectorial and regional differences. Similarly, other theorists have also argued for the need to cover both national differences and organizational contingencies, although they have used different terminologies: macro economy, micro economy (Gronghaug,1992) exogenous, endogenous (Brewster, 2004; Brewster, 1994), external and internal variable (Morley, 2004). How the theory applies particularly to the European setting remains a conceptual and empirical challenge. One problem is that the complications noted above make research difficult and there is a scarcity of empirical data (Brewster, 2004; Brewster, 1994). Despite these theories and the complexities of understanding different national contexts geographical differences are apparent, and the effort to understand them is important. There are a number of critical differences between the North American context and the European (Brewster, 1994). Such a comparison involves substantial generalization. We must remain aware of the substantial differences of the substantial differences within North America, even within individual states in the USA and the differences between European countries.

3. Research methodology

Research methodology in this paper is based on the simulation of the data from 1993 to 2009 for employees in research and development activities by occupation and sex and for employees working in the fields of RDI activities. Data were taken from the Romanian National Institute of Statistic updated database Tempo online at 21.10.2010. Data used in this study, for this simulation was taken in December 2010. This research is based on the real data of Human Resources from RDI area, as a case study for Romania.

[Sources:<https://statistici.insse.ro/shop/index.jsp?page=tempo2&lang=ro&context=26:CDP102B>]

The central objective was to see what was happened in the period indicated (1993 -2009) with human resources, if the real data respect a regression curve at a specific order which have to be determined. Another objective is to determine the coefficient for the regression curve obtained for HR data.

4. Descriptive statistics and results

Employees in research and development activities by occupation and sex

Number of employees in research and development activity is the total number of employees at one point, which participate directly or indirectly, to solve problems that are the objects of the unit, being paid for services performed.

Data for the period 1990 - 1992 are not available because the methodology was based on the recommendations of UNESCO (in research and development and design was included) that were different from those used by OECD and Eurostat, according to the Frascati Manual. Since 1993, UNESCO gave the methodology.

Human Resource in Science and Technology (HRST) maximum value was recorded in 1993 when there were 75,618 employees and the minimum value was registered in 2000 and had the value of 37,241. If in 1993 were registered the maximum number of employees 75,618 in Research & Development & Innovation area, 37,878 were women - that was 50.07% and 37,770 were men - that is 49.92%. In 2000 they were registered with the minimum number of employees 37,241 in R&D&I, 17,114 were women - that is 45.95% and 20,127 were men - that is 54.04%. The total human resource engaged in R & D & I area in 1993, researchers 5 and 6 level of education according to ISCED, employees with higher education - level 5 and those with higher education and doctoral - level 6) is 52.32%, technicians (who have only secondary education level) is 23.97% of the total employees engaged in human resource that RDI and the rest up to 100% are other categories of employees. In 2000 the human resource engaged in research

decrease the number of researchers with doctorates and higher education is 62.24% of the total number of employees in RDI, the number of technicians is 18.13% of other categories of employees total RDI sector is 19.62%. In 2009, the human resource of RDI increases compared to 2000 when there was minimum, with 5179 employees, ie by 13.9% compared to 2000, when he was at a minimum. In 2009 the total human resource is lower compared to the maximum value of 1993 to 43.92% ie 33,228 employees, and higher minimum of employees in 2000 to 5179, representing a 13.9% share - more employees than in 2000. You could say that 54.33% of the human resource engaged in RDI sector in 2009 were men and 45.66% were women.

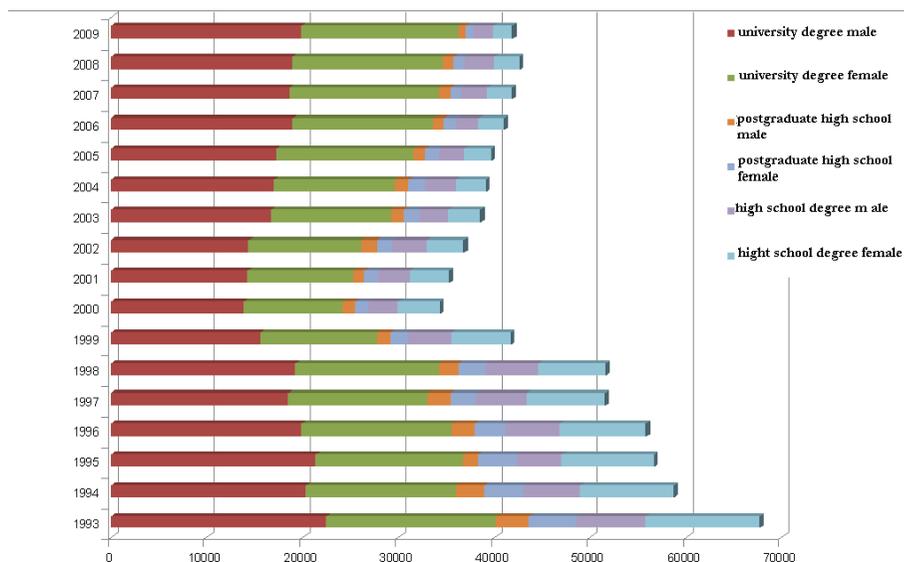


Figure 1: Human resources with different categories of graduation diploma.: University degree (male and female), high school graduation diploma (male and female) and postgraduation high school diploma (male and female).
(Source: author's calculus)

Employees working in the fields of RDI activities

The results used in this study were taken from the site of Romanian National Institute for Statistics data base Tempo online, the updated database on 21.10.2010, Data were taken for simulations in December 2010.

(Source:<https://statistici.inse.ro/shop/index.jsp?page=tempo2&lang=ro&context=26>: CDP102D, and Romanian Statistical Yearbook, 2008) :Number of employees in research and development activity is the total number of employees at a time, that participate directly or indirectly, to solve problems that are the objects of the unit, being paid for services performed.

Depending on training, a diploma of graduation, the researchers are employed on such scientific fields: natural and exact sciences, engineering and technological sciences, medical sciences, agricultural sciences, social sciences and humanities. For the period 1990-1994 data are not available due to data collection, it was not carried out of the research and scientific domains.

To study the number of researchers in scientific fields we used the data available between 1995 and 2009. It seems that the total number of researchers fell in 2000, with the lowest value: 23,179 for Romanian researchers in the whole system, and the highest value was recorded in 1995: the return of 35094. Are placed the number of researchers in 2008 (at 3084 value) and then drop again in 2009 with almost 200 employees in Romania.

In Figure 2 is shown the graphically the variation in time from 1995 to 2009 the number of researchers in total and for the natural and exact sciences, engineering and technological sciences, medical sciences, agricultural sciences, social sciences, humanities.

It may be noted that the highest number of researchers is recorded in engineering and technological sciences and the natural and exact sciences. Were represented graphically for example, the total number of researchers, the number of researchers in the natural and exact sciences and the number of researchers in engineering and technological sciences and found that it corresponds to the order of 6 to regression curves for all 6 areas.

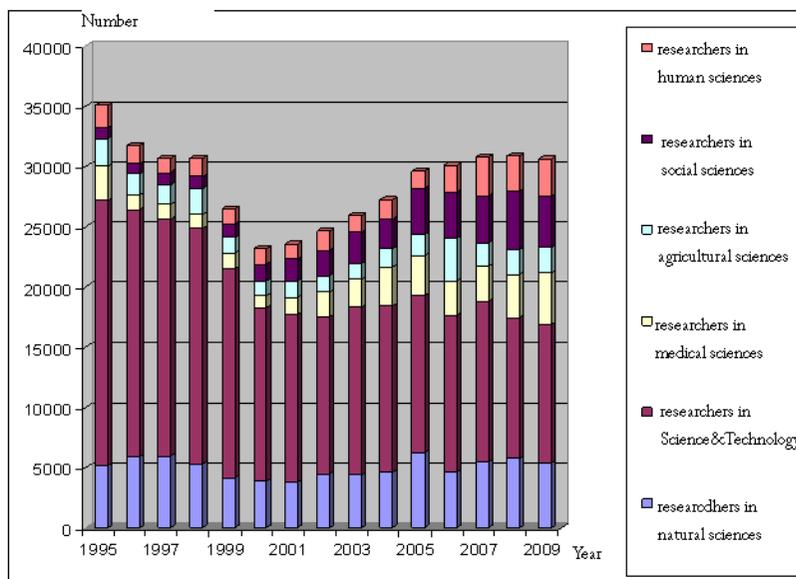


Figure 2: Researchers on different areas of research as human sciences, social sciences, agricultural sciences, medical sciences, Science & Technology and natural sciences.

Source: graphics are from auhours results based on the data took from <https://statistici.insse.ro/shop/index.jsp?page=tempo2&lang=ro&context=26>:

Table 1: The coefficients C_0, \dots, C_6 , R^2 and order of regression equation for different activities domain

	order of regression eq.	R^2	C_0	C_1	C_2	C_3	C_4	C_5	C_6
Total number of researchers	6	0.947	39998	-8105	3819	-1055	138.6	- 8.254	0.181
Engineering and technological sciences	6	0.977	25033	-5128	2624	-725.1	92.26	-5.364	0.116
Natural and exact sciences	6	0.758	1123	6075	-2493	423	-34.64	1.367	-0.020
Agricultural sciences	6	0.591	5188	-4695	2355	-547.8	62.50	3.392	0.07
Medical sciences	6	0.947	5642	-4325	1668	-341.1	38.61	-2.202	0.048
Social sciences	6	0.975	443.7	807.3	-480.2	124.4	14.79	0.847	-0.018
The humanities	6	0.913	2566	-840.2	144.5	11.15	-5.318	0.489	-0.014

Source: author calculus

The characteristic equation of the regression for the data in the present study is:

$$y=C_6x^6+C_5x^5+C_4x^4+C_3x^3+C_2x^2+C_1x+C_0$$

Coefficients C_0, \dots, C_6 are listed in table 1 for each case.

For **the total number of HRST in RDI**, in 1995 was 35,094 the maximum number recorded, in 2000, the minimum number of 23,179 was registered. For **engineering and technological sciences**, in 1995 was recorded the maximum number of 22,024 researchers and 11,538 is the minimum number of registered 2009. We can observe that HRST engaged in technological sciences and engineering decreased from 62.75% in 1993 to 37.65% in 2009. For **natural and exact sciences**, maximum number of researchers in 2005 is 6238 and 3781 is the minimum in 2001. HRST recorded in RDI in natural and exact sciences and the exact ranges vary from 14.76% of the total number of researchers in 1993 to 17.54% in 2009. For **agricultural sciences** the maximum number of researchers in 2006 was recorded as 3567 and 1244 was the minimum recorded in 2000. The percentage of agricultural science research ranging from 6.6% in 1995 to 5.4% in 1997 then has been an increase from 7% in 1998 and then was an decrease to the minimum value of 5.04% recorded in 2000 and then in 2006 reach to maximum of 11.84%. For **medical sciences** the maximum number of HRST was recorded in 2009 as 4289 and in 2000 was recorded the minimum number of researchers, 972. As percentage, engaged in the RDI as HRST in the field of medical science, increasing from 7.89% in 1995 to 13.99% in 2009. For **social sciences** there was the maximum value recorded for HRST in RDI in 2008, 4862 and the minimum of 834 registered in 1996. As percentage we can say that HRST in social sciences vary from 2.57% in 1995 to 15.75% in 2008. For **the humanities** the maximum value registered for HRST in RDI since 2007 is 3149 and the minimum value recorded is the value of 1153 in 1997. At the humanities sciences, researchers percentage is increasing from 3.76% in 1997 to 10.24% in 2007, then decrease slightly.

This type of study was done in order to make a first type of simulations of HRST in RDI sector in Romania. We deal in this paper with the HRST (used form the updated database at 21.10.2010 of www.insse.ro) having different activities as engineering and natural sciences to humanities and with different graduation degrees. The conclusions are that the smallest amount of HR was recorded in 2000 and the highest was in 1995. We succeed to do a simulation on the evolution of Human Resource during this period (1993-2009) in Romania and we observed that real data fitting on an regression curve of sixth degree whose coefficients were defined during this study. This type of simulation can be good for future forecasting of HRST in RDI sector in Romania.

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SOME STATISTICAL RESULTS REGARDING THE EVALUATION OF THE QUALITY OF THE MASTER EDUCATION

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The article emphasizes aspects regarding the evaluation of the higher education's quality. In certain countries, the questionnaires regarding quality of the activity of HEIs (Higher Education Institutions) are administrated by specialized institutions led by the Ministry of Education or the university associations. The evaluation principles derive from well-known economic and social theories, evolving even evaluation models (see the SERVQUAL model). As a result of the Bologna Treaty (1999), the European Union has the objective to become an international reference concerning the higher education quality and to be more attractive than in the present for students, professors and researchers from other regions of the world. So as to fulfill these objectives ENQA (European Association for Quality Assurance in Higher Education) recommends HEIs to include in their development plans regarding quality aspects five principles described in the article. The practical study refers to the results of a questionnaire applied to the master business students from a Romanian university. In order to assess the level of satisfaction of students in relation to the master programme they are involved in, a questionnaire was applied on a sample of 200 such persons. The responses were then analyzed using multidimensional data analysis methods. Out of these, the present research is based on multiple response analysis. In the questionnaire, students were asked to return their level of satisfaction for different aspects related to the educational process they are involved in. The questions were constructed as five-level Likert items. In this way was insured a connection between answers given at each of the questions assessing the quality of the programme. Only 0.2% of the answers given relate to aspects about which the students were not satisfied at all. These answers represent 3.2% of the number of respondents. 30% of the students were slightly satisfied, returning 57 choices of this type. As one can see, the volume of each group increases with the level of satisfaction. The processing of the questionnaire was made on recent economic theories concerning the quality assurance in the university environment, which are briefly presented in the beginning of the article.

Keywords: higher education, teaching quality

JEL classification: I21, I23

I. Introduction

A new master programme has started at the Faculty of Economics and Business Administration, Babes-Bolyai University of Cluj-Napoca. The courses are intended to prepare specialists in European funding audit procedures. The goal of the programme is of major importance now-a-days, taking into consideration the fact that Romania is in the process of structural funds absorption. Having well prepared individuals to work in the field should increase the sums attracted and the quality of the results. This research bring forward partial results of the study. It

aims at presenting a brief description and evaluation of the level of satisfaction of the students in relation to the master programme, based on their demographic characteristics.

II. Overview

In order to compare the results of the students' evaluation some evaluation schemes have become unitary at national level. In Greece for example, the questionnaires regarding the activity quality of HEIs (Higher Education Institutions) are administrated by the Hellenic Quality Assurance Agency for Higher Education. The basic principles of the evaluation start from the SERVQUAL model, developed in the studies of Parasuraman and al. (1988) and Tsinidou, Gerogiannis and Fitsilis (2010) which define five dimensions for quality: 1) *Tangibles* 2) *Reliability* 3) *Responsiveness* 4) *Assurance* 5) *Empathy*.

As a result of the Bologna Treaty (1999), the European Union has the objective to become an international reference concerning the higher education quality and to be more attractive than in the present for students, professors and researchers from other regions of the world (Commission of the European Communities, 2003). So as to fulfill these objectives ENQA (European Association for Quality Assurance in Higher Education) recommends HEIs to include in their development plans from the quality area the following principles (ENQA, 2005):

- 1) Define the policy and procedures for quality assurance of the quality and standards of their programs and awards, including their systematic review. Institutions need to adopt a culture of quality improvement in all aspects of their educational product.
- 2) Assessment of students using published criteria, regulations and procedures consistently applied.
- 3) Quality assurance of teaching staff, facilities and resources.
- 4) Data processing of information collected through surveys and other sources for the effective management of the institution and customer service.
- 5) Objective and up to date information available to the public about a variety of issues such as degrees and awards offered, financial data, quality assessments etc.

For reaching the quality objectives in agreement to the principles stated by ENQA, HQAA utilize an AHP - Analytical Hierarchical Process (see also Saaty, 1980, Mare et al., 2011). The main goal of AHP „is to classify a number of alternatives (e.g. a set of quality determinants) by considering a given set of qualitative and/or quantitative criteria, according to pair wise comparisons/judgments provided by the decision makers” (Tsinidou, Gerogiannis and Fitsilis, 2010, p.231). Keeping with Jadhav and Sonar (2009) the leading advantages of the AHP method are:

- its capability to provide a hierarchical decomposition of a decision problem that helps in better understanding of the overall decision making process;
- the fact that it handles both quantitative and qualitative criteria;
- its repose on relative, pair wise comparisons of all decision elements; instead of arbitrarily defining a percentage score and a weight for each decision element, AHP allows the decision maker to focus on the comparison of two criteria/alternatives, at a time, thus it decreases the possibility of defining ratings based only on personal perceptions of the evaluators or other external influences;
- AHP is applicable to both individual and group-based decision making (this is often achieved by considering the geometric mean of comparison values),
- it enables consistency checks upon pair wise decision judgments;
- it supports sensitivity analysis to examine the effects of changing values of criteria weights on the final ranking of the decision alternatives.

One of the main important points now at European level is the lifelong learning process. Increasing it has become a major objective in all the treaties and strategies of the European

Union. Another important aspect very much discussed is the correlation between university programmes and the skills the labour market demands. Only with the condition of complying with this “demand” the lifelong learning process will improve. Based on the above mentioned issues, the goal of this research was to see the degree of satisfaction for students involved in the master programmes related to audit at the “Babes-Bolyai” University, Faculty of Economics and Business Administration, Cluj-Napoca, Romania.

III. Methodology

In order to assess the level of satisfaction of students in relation to the master programme they are involved in, a questionnaire was applied on a sample of 200 such persons. The responses were then analyzed using multidimensional data analysis methods. Out of these, the present research is based on multiple response analysis. Variables having the same answering pattern were grouped and analyzed together in multiple response sets. The procedure was applied in order to emphasize connections that exist between the variables in the set. Moreover, cross correlations were tabulated between the set and other variables under study. The latests are, in fact, demographic features of the students involved in the research.

In the questionnaire, students were asked to return their level of satisfaction for different aspects related to the educational process they are involved in. The questions were constructed as five-level Likert items. In this way was insured a connection between answers given at each of the questions assessing the quality of the programme. Thus, for each question, 1 represented strong dissatisfaction (not at all satisfied) and 5 a high level of satisfaction (extremely satisfied). In the end, they were asked to give some demographic information about them – sex, employment, education, etc.

IV. Results

From the sample of 200 master students, 10 were eliminated due to too much missing answers that would have distorted the results. Consequently, the final analysis sample consists in 190 persons involved in the programme.

Using the multiple response methodology, variables that assess the level of satisfaction on different areas were put together in a multiple response set. In total, there are 15 variables in the set.

As can be seen in Table 1, most of the students are very satisfied or extremely satisfied with the activities in the master programme. The multiple response analysis deals both with the number of responses and the number of cases. The 190 students gave 2834 answers to the questions in the set. Constructing the ratio, result approximately 15 answers per person surveyed (the value of 1491.6% in the Total row). This means that all of the students gave an answer to the questions under analysis.

Table 1. Multiple response set for assessing the level of satisfaction of the students in relation to the master programme.

		Responses		Percent of Cases
		N	Percent	
Level of satisfaction	Not at all satisfied	6	0.2%	3.2%
	Slightly satisfied	57	2.0%	30.0%
	Moderately satisfied	300	10.6%	157.9%
	Very satisfied	925	32.6%	486.8%
	Extremely satisfied	1546	54.6%	813.7%
Total		2834	100.0%	1491.6%

Source: authors' calculus.

Only 0.2% (6 in absolute value) of the answers given relate to aspects about which the students were not satisfied at all. These answers represent 3.2% of the number of respondents. 30% of the students were slightly satisfied, returning 57 choices of this type. As one can see, the volume of each group increases with the level of satisfaction. Hence, 300 choices of moderately satisfaction were made. The gap between these three groups already presented and the last two is huge. They account for not even 13% of the responses received. Almost 33% of the answers were given for the very satisfied group, while the majority of more than 50% declared to be extremely satisfied. On average, out of 15 individual choices, a person declared to be extremely satisfied in 8 of them. As stated above, we were also interested to see the connections between the level of satisfaction and some characteristics of the individuals. Out of the demographic variables, two have proved to weight more as importance in the analysis – the average grade of the final exam and the status on the labour market.

The results in Table 2 show that most of the students from the studied master programme are students with very good final grades. When going deeper into the analysis, the most important thing to be emphasized is that there is a direct connection between the level of satisfaction and the average final grade of each individual. Thereby, the higher the final grade, the higher the level of satisfaction. From the point of view of the analysis this is very good. Because persons that have studied well during the faculty period have insured themselves a good background, that allows for objective evaluation in respect to the field and the goal of the master programme.

When assessing the status of the individuals on the labour market, there are two main groups identified – students that do not work at all and students who work more than 20 hours a week. The majority of each group is extremely satisfied with the programme. But, at a closer look (see Table 3) students that work more than 20 hours a week are also to be found more in lower satisfaction groups. This because they may have the expertise to make a better evaluation of the programme than persons that have not yet come into contact with the requests of the labour market. The latter group has given 24 answers of slightly satisfaction in comparison with 12 given by the ones that do not work and 17 by the ones that work less than 10 hours/week. They also represent the majority of the ones that are not at all satisfied by the courses in the master programme.

Table 2. Assessing the level of satisfaction in respect to the average grade of the final exam for the bachelor programme.

			Average grade of the final exam			Total
			7-8	8-9	9-10	
Level of satisfaction	Not al all satisfied	Count	1	1	4	6
		% of Total	0.0%	0.0%	0.1%	0.2%
	Slightly satisfied	Count	9	17	30	56
		% of Total	0.3%	0.6%	1.1%	2.1%
	Moderately satisfied	Count	59	76	156	291
		% of Total	2.2%	2.8%	5.8%	10.8%
	Very satisfied	Count	79	211	581	871
		% of Total	2.9%	7.9%	21.6%	32.4%
	Extremely satisfied	Count	167	352	943	1462
		% of Total	6.2%	13.1%	35.1%	54.4%
Total		Count	315	657	1714	2686
		% of Total	11.7%	24.5%	63.8%	100.0%

Percentages and totals are based on responses.

Source: authors' calculus.

Table 3. Assessing the level of satisfaction in respect to the students' status on the labour market.

			Do you work?				Total
			No	I work less than 10 hours/week	I work between 10-20 hours/week	I work more than 20 hours/week	
Level of satisfaction	Not al all satisfied	Count	2	0	0	4	6
		% of Total	0.1%	0.0%	0.0%	0.1%	0.2%
	Slightly satisfied	Count	12	17	4	24	57
		% of Total	0.4%	0.6%	0.1%	0.9%	2.0%
	Moderately satisfied	Count	82	55	19	143	299
		% of Total	2.9%	2.0%	.7%	5.1%	10.7%
	Very satisfied	Count	265	137	59	456	917
		% of Total	9.5%	4.9%	2.1%	16.3%	32.7%
	Extremely satisfied	Count	638	181	21	685	1525
		% of Total	22.8%	6.5%	.7%	24.4%	54.4%
Total		Count	999	390	103	1312	2804
		% of Total	35.6%	13.9%	3.7%	46.8%	100.0%

Percentages and totals are based on responses.

Source: authors' calculus.

V. Conclusions

The partial results presented here have emphasized the high level of satisfaction of the master students in relation to the programme they are involved in. As presented above, out of 15 possible individual answers, on average, more than 8 of the choices were in the group of extreme satisfaction. This means that the professors have been able to have their courses at a high standard, insuring the quality of the master programme analyzed. This pure descriptive analysis is going to be completed in future studies by more complex data analysis methods intended to put into light specificities of the research.

Acknowledgements.

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SECTION: FINANCE, BANKING AND ACCOUNTING

SUB-SECTION: FINANCE

A STUDY CONCERNING THE OPPORTUNITY OF INTRODUCING THE FLAT TAX IN THE CASE OF THE INCOME TAX FOR INDIVIDUALS IN ROMANIA

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In this paper we will try to find out if the flat tax as an income tax has answered the objectives of the governors in the field of the public economy. We will study if the budgetary receipts from this particular tax met the expectations of those who thought that this could be a solution in order to energise the economic and social activity.

Keywords: flat tax, income, budgetary receipts,

JEL: H21, H24, H31

In this paper we will try to determine the way in which the flat tax has influenced or not the social and economic activity in Romania. This topic belongs to the domain of public finances as an element of the public policies applied in our country during the last period. The importance of this theme lies exactly in the meaning of this concept – flat tax - meaning that nowadays is widely used both by the taxpayers, directly supported by them, as well as by the fiscal decision makers who have considered as being adequate for Romania's situation in 2004. At the end of the research we hope to obtain an accurate image of the impact that this sampling method has had on the social and economical dimensions. Unfortunately, the imposed dimensions of the paper will not permit us to approach the flat tax's both directions of action: the income tax and the personal income tax. This is the reason why we will discuss only the part referring to the personal income tax, because we consider that the number of the persons involved is large enough to justify this research. Moreover, we consider that every one of us is interested directly if the election promise made in 2004 had coverage.

Maybe, from a theoretical point of view, the approaches have been multiple during the last 6 years. However, we consider that our research can be of a real help in determining the usefulness of implementing a flat tax in the field of the individuals' taxation.

In order to achieve the proposed objectives, based on statistical data, we will study how government revenues have been realized from the above mentioned source, as well as if the rate at which the individual's tax receipts has answered the expectations of the fiscal policy makers.

First of all, the sphere of the public finances requires the mobilization of the financial resources needed for the state to function properly, and then the allocation of these resources according to opportunity and necessity. (Văcărel et al. 2003: 35). In addition to these two dimensions of the public finances science, this contributes also to the shaping of the social and economic phenomena. Therefore, it is important to look at finances as a cybernetic system which has its own dynamics that is being refined and is being adjusted in a more difficult manner in the real time, requiring feed-before or feed-back adjustment mechanisms. (Corduneanu 1998: 29 - 31). These are used whenever a decision is taken, but it seems to be easier to notice things happening than to predict what will happen. In the present paper, the approach will be *post factum* and we will analyze what happened between 2005-2009, comparing of course, dates and facts with those in the years before the changing of the flat tax on individuals' incomes. Thus,

we turn to statistical yearbooks from the years that we want to study from this point of view and according to these data we will develop tables and graphs to help us to build an accurate image of what happened in our fiscal system, studying the budgetary income and, in the field of the economic and social activities, trying to grasp the impact of switching to the flat tax of 16%.

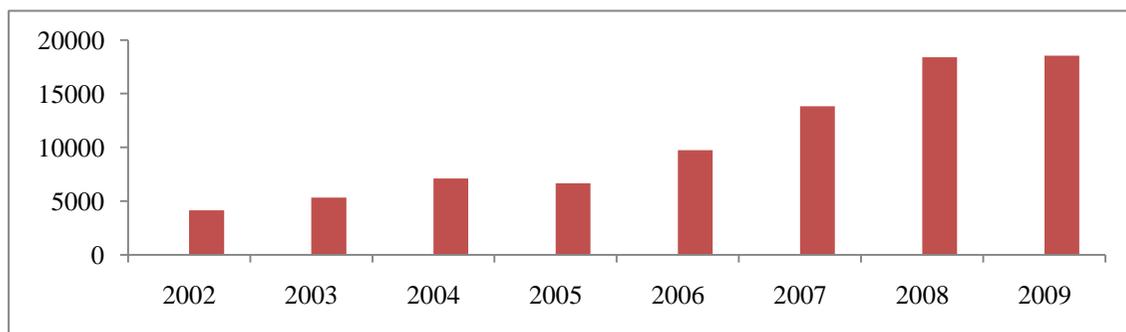
We consider that this way of treating the proposed subject is able to provide the accurate image that we are looking for, and in this respect we will collect the data between 2002-2009, data that will be positioned in a table, in order to facilitate their observation in parallel.

Table no.1. The evolution of budgetary revenues personal income tax in Romania. Years 2002 - 2009 (million)

	2002	2003	2004	2005	2006	2007	2008	2009
Budgetary incomes from the income tax	4132,30	5326,90	7103,70	6670,20	9739,3	13828,8	18398,3	18546,3

Source: Statistical Yearbook of Romania. Time series, 2010 edition. Coordinator: Vergil Voineagu. Edited by the National Institute of Statistics, Bucharest, 2011

As we can easily notice, at the moment of the 16% flat tax's implementation, in 2005, there was a fall in the volume of the receipts from the personal income tax, and during the following years, increases were recorded again. In order to create a more accurate image about the evolution of the receipts, we will make two graphs to help us in this respect. One of these will be in the form of a line, while the other one will be in the form of bars. At the beginning we will insert the bar chart.



Made by the authors

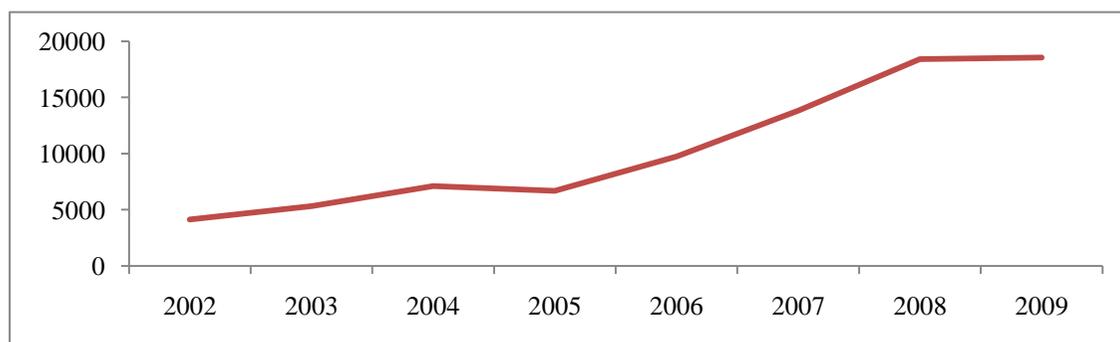
Graph no. 1. The evolution of budgetary revenues from personal income tax in Romania. Years 2002 - 2009 (million lei). Bar graph

From the graph we can observe more easily than from the table, the behaviour of the income tax's receipts on individual's incomes during the period in discussion. The syncope recorded in the studied indicator in 2005, moment in which the 16% flat tax was introduced, can be easily noticed. The desideratum of the persons who promoted this fiscal measure was to make this tax more attractive, because it seems somehow strange and frustrating to yield some of the fruits of your labour, in other words, "the result of income, wealth and welfare may not be in accordance with what the society considers to be just." (Hoanță 2000:71). The attractiveness can be seen from the perspective of another indicator (unfortunately not taken into consideration in

Romania), the one of fairness perceived according to the Economic Report presented by the President of the United States in 1996.

The way the tax payers perceive a certain tax has an extreme importance for a fiscal system, due to the fact that there is a resistance against the tax itself. Finding ourselves in the position of determining the influence of the tax on personal incomes, we can say that the fiscal decision makers should be more concerned about what the taxpayers consider about a sampling or another.

Reducing the sampling rate for this tax, the state considers that the subjects of this, the taxpayers, will show an intention to declare their incomes in a more fair manner, and thus a part of the underground economy comes to the surface. In order to see if this thing has been done, we will make a second graph, the one with lines that will give us an image of the growth slope of the studied tax revenue.



Made by the authors

Graph no. 2. The evolution of budgetary revenues from personal income tax in Romania. Years 2002 - 2009 (million lei). Lines graph

In this graph we distinguish the falling of the budget revenues from the tax on personal income for the year 2005 but we also notice that between 2006 and 2008 the growth slope of the studied indicator was relatively significant.

From both graphs it is absolutely clear the fact that in imposing personal income tax, the crisis was felt, this being the most convenient explanation for the deterioration of the slope for value collection in 2009 in comparison with 2008.

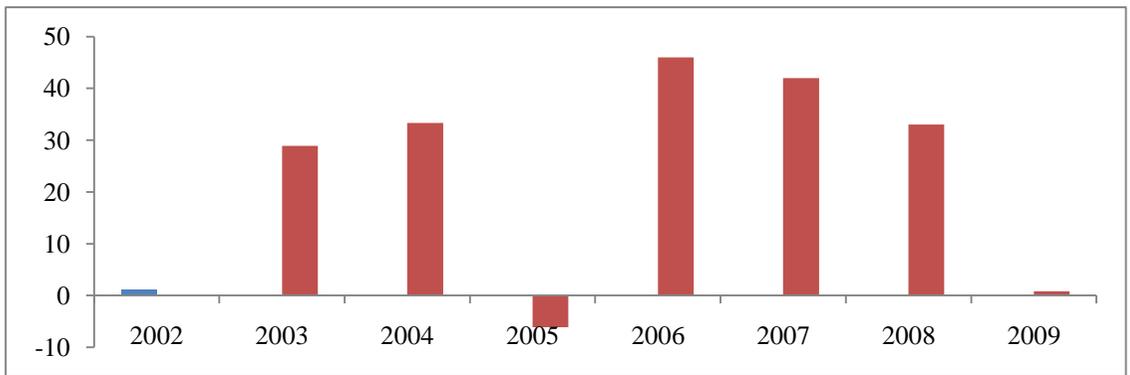
In order to make us a better picture of the evolution of this indicator, we will build another set of table and graph in which we will put data resulting from personal calculations, made using data from Table no.1. In the calculations done, we have searched to catch the growth rhythm of the budgetary incomes from the tax on personal income.

Table no. 2. The growth rhythm of the budgetary revenues from the tax on personal income in Romania. Years 2002-2009 (%)

	2002	2003	2004	2005	2006	2007	2008	2009
The growth rhythm of the revenues	x	28,91	33,36	-6,10	46,01	41,99	33,04	0,80

Source: calculations done by the author based on data from Table no. 1

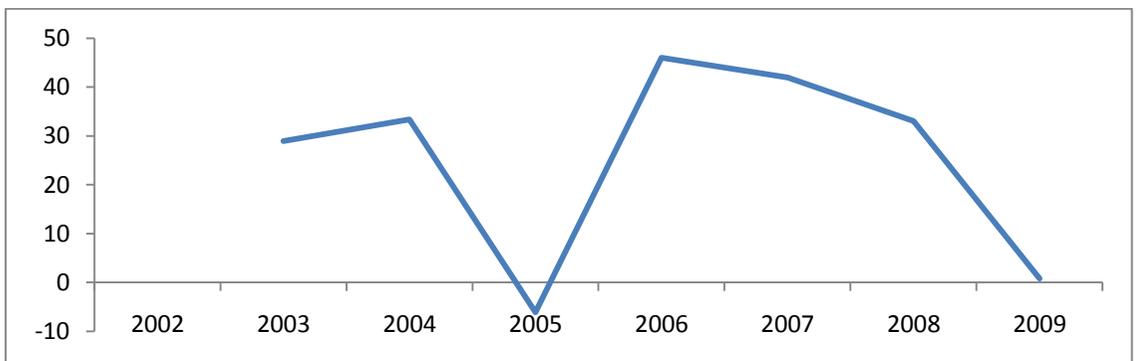
We will attach to table no. 2, the adherent graph:



Made by the authors

Graph no. 3. The growth rhythm of the budgetary revenues from the tax on personal income in Romania. Years 2002-2009 (%) Graph with bars

From the graph it is absolutely clear that the evolution of the growth pace has not been a constant one, but rather heterogeneity of the behaviour, a growth from one year to another being observed in the years preceding the introduction of the 16% flat tax. And during the following years, after the implementation of the fiscal measure, we can notice a sudden fall of the indicator, then a return to the upward slope, and again a constant decrease in 2009. The statistics for 2010 have not been finalised, so we cannot make a picture of the development between 2010 and 2009. We will make another graph, based on the same data, this time with lines, for the ones who want to expand the research in this field to be able to choose whichever seems more appropriate.



Made by the authors

Graph no. 4. The growth rhythm of the budgetary revenues from the tax on personal income in Romania. Years 2002-2009 (%) Graph with lines

Indeed, we could say from this one that the spectacular fall of the growth rhythm of the budgetary revenues on personal income is more evident, both for 2005 and during the period after 2006. In conclusion, we could advance the hypothesis that the introduction of the 16% flat tax on personal income did not answer the expectations of those who have promoted it, to a significant extent, judging from the development pace of the budgetary revenues from this source, even if the amounts provided as budget revenues have increased from one year to another (except for 2005). If the evolution of the earnings growth has been maintained on an upward slope, things would have been different, especially if we take into account the characteristics of the Romanian economy between 2006-2008. Referring to the statistical data (provided by NIS) concerning the gross domestic product for the studied period, and at a deeper analysis the growth rhythm of the

last mentioned indicator, we can make a comparison between the evolutions of the two development rhythms.

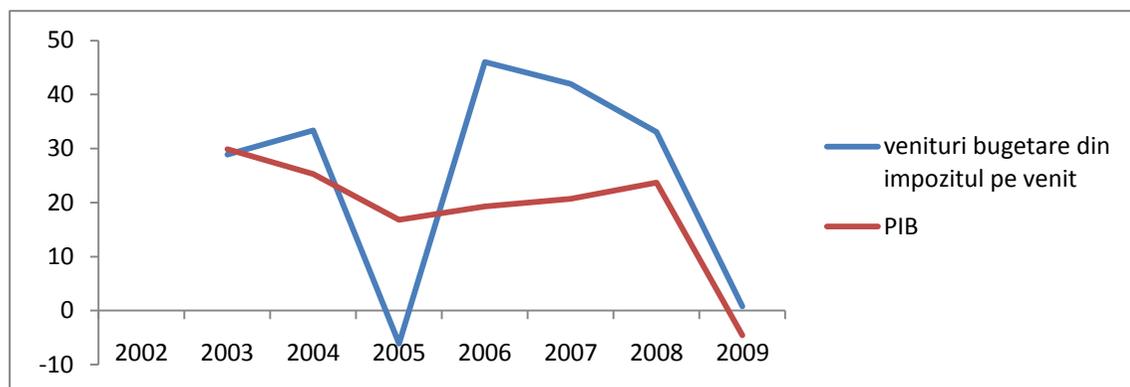
We will make this task all through a set-table in which we will position the values obtained from personal calculations.

Table no. 3. The growth rhythm of the budgetary revenues from the tax on personal income and of GDP in Romania. Years 2002-2009 (%)

	2002	2003	2004	2005	2006	2007	2008	2009
The growth rhythm of revenues	x	28,91	33,36	-6,10	46,01	41,99	33,04	0,80
GDP	x	29,87	25,30	16,81	19,28	20,70	23,72	-4,55

Source: personal calculations of the author

From the table above we cannot make an accurate picture of the parallel evolutions of the two studied indicators, thus we will insert the chart constructed on the basis of the data included in Table no. 3.



Made by the authors

Graph no. 5. The growth rhythm of the budgetary revenues from the tax on personal income and of GDP in Romania. Years 2002-2009 (%) Graph with lines

From the graph we can better notice the development trend of the two studied indicators, between 2002-2009. The correlation between these two is at most incidentals and occurs mainly in the declining areas, but we can once again convince us that the implementation of the flat tax did not bring the fresh budgetary air needed by the Romanian public finances. If we consider the opposite angles of the two indicators' evolution slopes between 2005-2008, we can notice that in the mentioned period there could have been a direct correlation between the two developments for this 16% flat tax to be as expected.

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THE “NEW ECONOMY” AND THE ENTREPRENEUR: REASSESSMENT AND PERSPECTIVES IN THE CONTEXT OF XXI CENTURY

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Abstract

Industrial revolutions, the progress in IT industry, the growth rate of developing new technologies, global competition, liberalization of markets, continue to demand change, globalization of market, economic and financial crisis are just some of the causes that have contributed to the restoration of a new global economic with direct impact on business entrepreneur. Changes socio-economic level paradigm is reflected both in changes to management and organization paradigms enterprise activity in the product market, at work, at the performance that follows the entrepreneur.

In this article we tried a summary of mutations in these paradigms, mutations that will rearrange and reposition the business entrepreneur in the current context of a sustainable economy, based on knowledge, so-called "new economy".

Keywords: „new economy”, sustainable development, enterprise, paradigms, changes, global performance

Jel Classification: D00, D20, D30, D40, D60

1.Introduction

The „new economy" so called "post-modern, post-industrial, post-capitalist", "post-traditional" reflects the current transition from industrial society to a new company "information "or" knowledge "is marked by complex and profound changes in all areas of activity, with major implications for economic, social and environmental process has a scale and speed unprecedented in world history.

Peter Drucker (1999) appreciate that: „We can be sure that the world will result from this rearrangement of values, beliefs, economic and social structures, political systems and concepts, in other words the conception of the world will be different from what anyone could imagine today. In some areas - especially in the company and its structure - the basic transformations have already taken place. The fact that the new company will be a non-socialist and post-capitalist one is practically a certainty. And it is also certain that her primary resource will be knowledge. "

The “new economy" or knowledge-based economy reflects that economy development that exceeded the threshold beyond which *knowledge* is the key resource. What makes this knowledge to become a resource so important? There are many factors which result in this most important being: progress in Information and Communication Technology (ICT), the increase the speed of development of new technologies, global competition, liberalization of markets, changing demand due to continuous growth rate of people middle and high income (which to develop a sophisticated demand for quality products), increasing the importance of quality of life. Dictum:

TIME IS MONEY (characteristic of capitalist society) was replaced with: KNOWLEDGE IS POWER (information society, knowledge society).

At present we can summarize three factors that determine the primordial transformations taking place in society, making the transition from industrial-type economy to the “new economy” based on knowledge, namely: *technical-scientific revolution, globalization and financial crisis.*

Human society has changed a lot and change now increasingly faster. Human society has gradually shifted emphasis from manufacturing to the production of automatic type, from individual knowledge to the group, thus emphasizing the importance of communication.

In summary, we present below the specific characteristics and socio-economic development steps:

Table 1: Characteristics of socio-economic development steps

Development Stage	Pre- industrial	Industrial	Post-industrial
Production Sector	Extractive	Manufacturing	Processes, services recycling
Economic Sector	Primary : -agriculture - mining -Fishing -Wood -Oil and Gas	Secondary: -production commodity consumer -goods-producing durable -constructions	Tertiary: -Transport -Utilities Quaternary -Trade -Finance -Insurance Quintenar: -Health -Education -Recreational
Resources Converted	Natural resources: water, wind, power animals, human strength	Energy created: electricity Nuclear power	Information: systems computers and data transmission

Source: W.J.Keegan, Multinational marketing management, Prentice Hall, Inc 1980, p.61

Table 2: Specifics stages of socio-economic development

Development Stage	Preindustrial	Industrial	Postindustrial
Production Sector	Extractive	Manufacturing	Processes, services recycling
Strategic Resources Technology	Raw materials Force	Financial Capital Technology cars	Knowledge Technology intellectual
Methodology	Common sense, experience, and error	Empiricism, Experimentation	Abstract theory, Simulation models, Decision theory, Systems analysis
Perspective temporal	Orientation to the past	Adaptability ad experimentation	Future orientation, predictions programming
Axial principle	Traditionalism	Growth economic	Codification knowledge theoretical, satisfaction and motivation
Key Concepts	group of individuals,	set of processes, teams,	set of knowledge,

Development Stage	Preindustrial	Industrial	Postindustrial
	hierarchy, bureaucracy, strategy	goals, ecosystem, marketing, negotiation	team free expression of creativity (no strict targets), innovation
Role Information	vehicle along hierarchical pyramid	bond between partners collaborate on projects common	scarce resource, support organization "aware" continuous learning

Source: own processing based on W.J.Keegan, Multinational marketing management, Prentice Hall, Inc 1980, p.61

2. General characteristics of the "new economy"

The specifics of these stages of socio-economic development have created the foundations for the development of the "new economy" which can be identified by several key characteristics:

A. *The new economy is based on new digital technologies*

In this new economy is intended exploitation of the potential information-based products and services. The main consequence is that the principles governing the information world (the world of intangible products and services) will soon dominate the hard drive world (the world of reality, of atoms, objects, oil and steel and heavy labor).

B. *The new economy is based on knowledge*

Products made in the "new economy" have a new property: knowledge. Their value is given by the logical facet and not physical - the material they contain. Therefore, they may be called "weightless". From money, materials, equipment and human resources, as the main categories used by the entrepreneur, today we come to recognize the paramount importance of a fifth resource which is information.

C. *The new economy is based on innovation*

The new economy is based on Information and Communication Technology (ICT), to alter radically the nature and trajectory of innovation. In the "new economy" usual economic logic, based on turnover and profit, is gradually replaced by a new logic, based on potential for development (innovation) and ensuring the completion of the three main principles:

- access (and answer) instantly;
- personalized service;
- simultaneous presence in several places (ubiquity)
- higher valuation of the assets "intangible" (which often increase the share value of shares of companies over the material assets).

For these reasons the science, technology and education are key factors in the "new economy"

D. *The new economy is based on learning*

The speed of technological innovation and competitiveness requirements asks for a continuous updating of knowledge and revolutionizes the education and training system, requiring the introduction of the new training concept ("life-long learning").

The "new economy" in all its manifestations, such as changing the requirements for many occupations and basic training in different jobs as follows:

- 80% of existing technology will be replaced in the next decade;
- Average life skills (abilities) of a worker (employee) is 3-5 years;
- In terms of technological advances we "getting old" at every 5 years and we need re-training.

Therefore, in the "new economy" learning process has great significance as a cumulative and continuous over time. New information and communication technologies offer new forms of education and training, distance learning, virtual university, computer training, etc. Learning process should and can take place anytime and anywhere. In the "new economy" learning and initiative are vital and largely determine the effectiveness of the activity.

E. The "new economy" is a global

Developing information and communications technology transform our economy in a global economy in which national economies interact. Trade and capital markets are globally connected and operates continuously (24 hours / day), at a distance and in real time.

F. The "New economy" is a sustainable and socially responsible economy

Currently we assist at the transition from an *uncontrolled development*, which was accompanied by irrational and inappropriate exploitation of resources and raw materials, the size of the profit driven, to sustainable development which has three main dimensions: *economic, social and environmental* development. The enterprises understood that to succeed in business must provide and ensure environmental protection and proper work conditions, pay for collective rights of employees, cooperate to this end with local communities in which they operate, with unions, non-governmental organizations and governmental institutions.

In the context of sustainable development gradually appears the corporate social responsibility concept. This concept defines the direction and attitude of a company for inclusion, voluntarily, in the strategy and its current work, the concerns (projects and activities) with the social and environment in terms of ensuring economic success of the business.

G. The "new economy" and financial crisis. Switching to a "new reconsideration financial economy"

The financial crisis has had an impact on re-establishing a new economic world order. In this context, some authors appreciate that the crisis has produced "breaks" in the history of the world economy, along with a fracture occurring in the economic thinking. Separation of such a model involves both a reform of financial capitalism and the architecture of international relations and building pluralistic development trajectories. (Popescu-Bogdanesti, 2011)

3. The enterprise and the "new economy"

As the main actor of economic phenomena, the enterprise could not remain outside of these concerns to reveal the substance of change. Simultaneously with the development of "new economy" we currently assist to a *change of the companies paradigms*, as follows:

A. Changing the paradigms of production and commercial processes, among which the transition to outsourcing, fragmentation and outsourcing activities, relocation of production ("outsourcing ") which allowed the appearance and growth of multinational transnational companies, and the transition from "a mass production (large series)" to " a flexible and diversified production (depending on individual customer requirements) are more important (in the context of this paper).

B. Changing the organizational and management paradigms, among which we mention the following:

- from the classic organization specializing single purpose, to the partnerships with networks; - from "Companies-structures" to "-project companies";

-from "we are separated and we compete" to "we are connected, we cooperate and we compete."
". Encouraging American proverb "if You Can not Beat Them, Join Them" (if you can not win, joining up with) is the current orientation of the world economy at the beginning of the third millennium.

We currently assist at the companies level to an emphasize of the mergers and consortiums process, to relocation of production ("Outsourcing"), to a virtualization of the organization, outsourcing, fragmentation and subcontracting of the activities

C. Changing the work paradigms

We are currently witnessing to a traditional labor paradigm shift from:

- routine work to "work is constantly changing";
- "office (work) first of all " to " work first of all ";
- Fixed-term work program to "flexible work arrangements";
- work (career) life to "career portfolio" which express the diversification of activities, and the professional and occupational mobility and flexibility.
- "fix" workplace to a "mobile "workplace;
- worker goes to work to "work comes to the worker";
- job choice based on location of residence to " you live in a place - you can work anywhere "or" work at distance . "

Management companies are radically. Firms ask for flexible forms of employment, a greater variety of styles even if they are experimental, the ability to perform several types of work, a greater customer orientation and using new information and communication technologies.

D. Changing the customer paradigms

The environment in which firms are currently developing has changed radically in recent years by:

- a) Taking control of the client, this supports more than to be perceived as a member of the community, and increasingly as an individual;
 - b) Changing customer attitudes towards products and services that:
 - it must be adapted / configured to satisfy customer needs;
 - it must be provided in an accessible and practical possible manner;
 - it must be delivered when it is convenient to the client.
 - c) Market globalization; the client often wants to have products / services worldwide.
- These transformations motivate business customer focus.

E. Changing paradigms of organizational performance assessment

From performance based on profit and then return, beginning of XXI century brings the new approaches of organizational performance assessment so that performance begins to be defined in terms of value creation. Defining performance based on value creation has undergone two stages. The first covers the period 2000-2005 when performance was defined by creating value for shareholders (stakeholders) and from 2005 until now when the performance involves the creation of value for holders of interests (stakeholders.)

In the current globalization of world economy, the performing company is "the enterprise that creates added value for its shareholders, satisfied the customers demand, take into account the opinion of employees and protects the environment. Thus, ownership is pleased that the company has achieved the desired return, the customers have confidence in the company's future and in the quality of its products and services and society benefits through policy adopted by the enterprise, environmental protection "(Jianu, 2006)

F. Changing the market paradigm under the crisis

Soros G. thinks that we need a new paradigm, whereas the dominant so far, the liberal balanced markets one, would have proved "false and misleading" and here the problems arising on the international monetary system. Past crises have only test the system and the present crisis has brought humanity into a turning point, where the old policies have no effect. Sand castle collapses. The moment is dramatic. The dominant balance and market fundamentalism paradigm is unable even to explain the current state of affairs. In this context, Soros G. believes that the time for recognition theory of reflexivity has come. This new theory introduces an element of uncertainty in human enterprises in general and financial markets in particular. (Soros, 2008)

4. Conclusions

The changes we are witnessing at present are unprecedented in human history. To cope with the competitive global marketplace, companies must keep up with these changes. Currently we are witnessing at the change paradigms on which were humanity based for centuries: changing the paradigms of production and commercial processes, the work paradigms, the customer paradigms, the paradigms of organizational performance assessment, the market paradigm under the crisis.

Under these conditions, management of an enterprise must redefine itself and adopt new directions, much more challenging, more flexible, more risky and more opened to the client and to the society as a whole.

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TAXATION OF WAGE INCOMES OBTAINED ABROAD BY PHYSICAL PERSONS

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The necessity to improve internal legislation regarding the taxation of incomes earned abroad emerges as a consequence of the harmonization with the provisions of community legislation and of the observance of European directives.

This paper aims to present legal provisions on Romanian taxation of wages from abroad, so that for each case that might be encountered in practice, to find how to declare the income and how these incomes are to be taxed.

The incomes from salaries earned abroad which are subject to taxation in Romania can be obtained not only for the activity carried out in Romania and paid by the foreign employers, but also for the activity carried out abroad and paid by Romanian employers. For individuals' incomes gained in Romania from a foreign employer, the way of taxation should be established according to employer's decision. Thus, if the employer elects for withholding them, neither employers, nor employees, are required to further submit specific statements of these revenues. Otherwise, employers should submit a statement every time when modifications such as activity start/cessation takes place and employees will submit monthly statements.

Legislation has been supplemented by the inclusion of non-resident individuals in the category of persons who submit Form 224. As concerns the wage incomes obtained by Romanian citizens abroad, by 2010 the corresponding box was omitted. Therefore, there were practical uncertainties regarding the method of granting the external fiscal credit for foreign wage incomes of a Romanian resident posted abroad.

Through the most recent legislative amendments, the provisions on granting external fiscal credit were extended to cover wage incomes too. The possibility to refund the taxes withheld by the Romanian employer was also taken into account, but a procedure in this regard has not been established yet.

The purpose of this paper is to highlight the importance of tax implications entailed by the posting of staff to other countries and the importance of compliance of internal legislation with the conventions for the avoidance of double taxation. The clear and concise presentation of the way of declaration and taxation of wage revenues from abroad leads to avoiding the confusions that may arise in practice and of the double taxation of these incomes.

Key words: wages, abroad, physical persons, taxation, declaration

Cod JEL: F53, H24, K34

In the context of evolution of international economic relations, in which the migration of workforce and the relocating of the personnel in other countries are current events, we notice the constant preoccupation of each state to improve the legislation regarding the taxation of incomes obtained abroad, taking into consideration both the necessity of protection, and the increase of budgetary incomes, as well as the observance of the provisions of conventions regarding avoiding double taxation. This state of facts can lead in practice to cases of double taxation of the incomes obtained by physical persons who have their residence in one state but who carry out their activity in another state. Solving these issues is attained by the involved states applying conventions whose main is avoiding double taxation, conventions signed by our country with

other states, which prevail on the provisions of internal legislation. During the time, internal legislation regarding taxation of these incomes was subject to permanent change and improvement, since the Romanian legislator adapted and borrowed a series of existent provisions in the OECD Model Tax Convention.

According to the provisions of the fiscal Code, the incomes from wages represent all incomes in money and/or in nature, obtained by a physical person who carries out an activity on the basis of an individual working contract or on the basis of a special status foreseen by law, irrespective of the period to which it refers, and of the denomination of incomes or the form under which they are given. The amounts or advantages received by physical persons from dependent activities carried out in a foreign state are not included in the category wage incomes and are not subject to taxation, irrespective of the fiscal treatment applied in the state in question, except for wage incomes paid by or in the name of an employer residing in Romania or with the permanent headquarters in Romania – which are subject to taxation irrespective of the period in which the activity is carried out abroad.

In the Commentaries of the OECD Model Tax Convention for avoiding double taxation there is established the general rule of taxation of wage incomes, and there is stated that these wages are subject to taxation by the state in which the work activity is carried out. Nevertheless, the remunerations will be taxed only in the state of residence if the following conditions are observed cumulatively:

- a) the beneficiary is present in the other state during a period or periods which last more than 183 days in any 12-month period which begins or ends in the year in question;
- b) the remuneration is paid by or in the name of the employer which is not resident of the other state
- c) the remuneration is not borne by a permanent headquarters which the employer has in the other state.

1. The taxation of incomes obtained by physical persons, from a foreign employer, for the activity carried out in Romania, and the taxation of incomes obtained by Romanian physical persons hired by diplomatic office or consulate acknowledged in Romania

1.1. Rules of taxation

The beneficiaries of these incomes are bound to pay a monthly final tax which is calculated and is retained at the source by the income payers.

The monthly tax is determined in the following way:

- a) at the place where the main job/function is carried out, by applying the quota of 16% on the basis of calculation determined as difference between the net income from wages, calculated by deduction, from the gross income, of the compulsory contributions afferent to one month and the following:

- personal deduction granted for that month;
- syndicate due payment for that month;
- contributions to the facultative pensions fund, so that, at the level of one year, the equivalent of 400 euros is not exceeded;

- b) for incomes obtained in other cases, by applying the quota of 16% on the basis of calculation determined as difference between the gross basic salary and the compulsory contributions on each place in which the incomes are obtained.

The conversion into lei of the amounts obtained in foreign currency, representing wage incomes, is done at the currency exchange rate communicated by the National Bank of Romania for the last day of the month for which the payments of these rights is done. In the case in which the wage incomes are paid during the month or in the case in which the working relations cease, the currency exchange rate established by the National Bank of Romania in force during the day previous to the one in which the payment is done is taken into account.

1.2. Taxpayers obligations

Physical persons have the obligation to calculate the tax monthly, by themselves or with the aid of a fiscal representative, to declare it and to pay it, till the 25th of the month following the one for which the income was obtained. Diplomatic office and consulates acknowledged in Romania, as well as representations of international organisms or of foreign commercial companies and of foreign economic organizations, authorized according to the law to carry out their activity in Romania, can choose that their employees who gain incomes from wages subject to taxation in Romania, fulfill obligations regarding the calculation, the payment and delivery of tax applied on the wage incomes. In the case in which this option is formulated and communicated to the fiscal representative by the employer, the beneficiaries of incomes from wage do not have anymore the obligation to declare them.

1.3. Declarations

The employees fill in and then submit the form 224 “Declaration regarding the incomes from salaries earned abroad by individuals that carry out their activities in Romania and by Romanian individuals employed by an authorized diplomatic office and consulate in Romania”. The declaration is submitted for free to the taxpayer, at his request. The deadline for submitting the declaration reads as follows:

- it is submitted monthly, till the 25th of the month following the one for which the income was obtained;
- anytime the taxpayer notices errors in the previous declaration, by filling in rectifying declarations, situation in which he puts an “X” in a case especially foreseen in this aim.

The declaration is filled in by taxpayers or by fiscal representatives of these taxpayers, with capital letters, written correctly, including all the data required by the form in two copies:

- the original is submitted to:

- a) the fiscal agency located in the region where the taxpayer has his residence, according to law, or the address where he lives, in the case in which this is different from the place of residence, for physical persons who have their fiscal residence in Romania;
- b) the fiscal agency located in the region where the source of income comes from, for all the other physical taxpayers;

- the copy is kept by the taxpayer.

The declaration is submitted to the registry office of the fiscal agency or at the mail office by recommended letter. Employers submit for each employee the form 222 “Information statement on the starting or termination of the physical persons’ activity, physical persons who carry on activity in Romania and who earn wage income from abroad”, except for the case in which he fulfils the obligation regarding the calculation, the payment and the delivery of tax on wage incomes. It is submitted at the fiscal agency located in the region where the employer has his headquarters or place of residence, anytime there appear changes regarding the starting or termination of the physical persons’ activity in the documents that certify the working relations, in a 15 day period starting from the day the event occurred.

In the category of employers who have the obligation to submit this declaration there are included: representations of other companies in Romania, associations, foundations or organizations with the headquarters abroad, international organizations and organisms that function in Romania and so on.

The declaration is placed for free at the disposal of physical or juridical persons, at their request.

It is filled in two copies:

- the original is submitted to the fiscal agency.
- the copy is kept by the employer.

We can notice that even if incomes are obtained from foreign employers, they will be taxed in Romania, since the activity is carried out in Romania, so the criterion of territoriality is applied in

this case. If till 2004 only the Romanian employees- physical persons with their place of residence in Romania- had the obligation to submit a declaration, starting with 2004 (by the Order of the Ministry of Public Finances no 160/2004 for the approval of the model and contents of forms regarding the administration of the tax on incomes earned by physical persons), the legislator took also into account the case of foreign physical persons who carry out activity in Romania and obtain incomes under the form of salaries from abroad. Consequently, the declaration is submitted by all the physical persons (Romanian or foreign) who carry out activity in Romania and obtain incomes under the form of salaries from abroad.

Thus, non-resident physical persons who earn wage incomes from abroad for the activity carried out in Romania, must pay tax in Romania in the following cases:

- the physical persons have their place of residence in states with which Romania has not yet signed conventions on the avoiding of double taxation and physical persons who cannot prove that they have their place of residence in a state with which Romania has signed conventions on the avoiding of double taxation. The incomes obtained by these persons from resident or non-resident employers is taxed in Romania starting with the first day in which they carry out activity in Romania;

- the physical person is present in Romania for one or more periods of time which last more than 183 days in any 12-month consecutive period which ends in the year in question (the principle of 183 days) or in the period and under the conditions mentioned in the convention regarding avoiding double taxation signed between Romania and a foreign state, in which case the taxpayer submits to the fiscal agency the monthly tax return declarations which will comprise the monthly incomes earned in the period previous to their prolonging their staying in Romania, within a delay of 15 days from the last day of the period of 183 expired days or the period mentioned in the convention. In the case in which the income beneficiary obtains the salary in a global amount on a time interval, after which the period of 183 days has expired or the period mentioned in the convention, the sums filled in the declarations can be established at the level of a monthly average, respectively the global amount of the declared salary divided by the number of months from that period.

2. Taxation of incomes obtained from salaries from abroad by Romanian physical persons with their place of residence in Romania, for the activity carried out abroad

Physical persons who owe tax on the incomes from salaries from abroad for the activity carried out abroad are:

a) Romanian physical persons with their place of residence in Romania;

b) physical persons who comply with the conditions of residence stated below during three consecutive years:

- the centre of vital interests is located in Romania;

- they are present in Romania on a period or periods which last more than 183 days in any 12-month consecutive period which ends in the year in question.

These persons have the right to be granted external fiscal credit, that is to benefit from the deduction of the tax paid abroad from the income tax due in Romania, except for the incomes from dependent activities carried out abroad and paid by a non-resident employer. These incomes are not taxed in Romania and they are not subject to external fiscal credit. In this category there are included Romanian physical persons with their place of residence in Romania and who comply with the conditions of residence, who are paid by a Romanian employer and are transferred abroad. In this case, if the Romanian employee paid by the Romanian employer is detached/transferred abroad for a period which lasts more than 183 days, the foreign state in which he carries out his activity must collect a tax from him, according to the conventions concerning the avoiding of double taxation. At the same time, the income payer-the Romanian

employer- is obliged to retain the tax afferent to wage incomes, which can lead to the double taxation of these incomes. Consequently, there will be applied methods for avoiding double taxation foreseen by internal legislation correlated with Conventions on avoiding double taxation signed by our country.

2.1. Conditions for granting the external fiscal credit

The external fiscal credit for incomes from salaries is granted if the following conditions are accomplished cumulatively:

- 1) the provisions of the convention on avoiding double taxation – signed between Romania and the foreign state in which the tax was paid – are applied;
- 2) the tax paid abroad for the income earned abroad was paid directly by the physical person or by his legal representative or by withholding tax at source by the income payer. The payment of the tax abroad is proved by a justifying document, issued by the competent authority of the foreign state in question.

The condition regarding the existence of a convention on avoiding double taxation signed between the state in which the Romanian person carries out his activity and Romania was introduced starting with 2010 (by O.U.G. no 59/2010 for the modification of Law no 571/2003 regarding the Fiscal Code). Through the most recent legislative amendments, the provisions on granting external fiscal credit were extended to cover wage incomes too. For incomes earned in the state with which Romania has signed a convention on avoiding double taxation and which have not been globalized with a view to taxation, the external fiscal credit is limited to the income tax paid abroad, but not more than the tax owed for a similar income in Romania.

We can thus be faced with two situations:

- a) the tax rate applied abroad is higher than the one foreseen by internal legislation, in which case the external fiscal credit is limited to the calculated income tax, applying the rate foreseen in internal legislation;
- b) the tax rate abroad is lower than the tax rate on a similar income from Romania, in which case the external fiscal credit is calculated at the level of income paid abroad, and the annual tax which is left to be paid in Romania is calculated as difference between the income tax applying the tax rate foreseen by internal legislation and the income tax paid abroad for the income earned abroad.

Taxpayers who carry out activity abroad and who are paid by a Romanian employer, are subject to taxation in Romania for the incomes obtained from the work activity carried out abroad. In the context of these provisions, in practice we will encounter cases of double taxation of incomes obtained by Romanian physical persons from a Romanian employer for the activity carried out abroad, in which case the Romanian employee paid by the Romanian employer is detached/transferred abroad for a period which lasts more than 183 days, and the Romanian state will tax according to the conventions on avoiding double taxation. At the same time, the income payer (Romanian employer) is obliged to withhold tax afferent to incomes from salaries obtained by the employees. In order to avoid double taxation of these incomes, the competent fiscal authority from Romania will proceed to the regularization of the tax due by the Romanian resident. In this case, the taxpayer will submit to the registry office of the competent fiscal agency or by mail a request of return, accompanied by the following justifying documents:

- a) the tax record drawn by the employer resident in Romania or by a permanent headquarters in Romania that is able to make wage payments;
- b) the certificate acknowledging the payment of the tax abroad by the taxpayer;
- c) the transfer contract;
- d) any other documents that can constitute the basis for determining the amount of the tax paid abroad for incomes paid by the employer resident in Romania or by a permanent headquarters in Romania.

In order to calculate the external fiscal credit, the fiscal authority will turn into lei the amounts expressed in foreign currency, at the average exchange rate of the currency market communicated by the national Bank of Romania, in the year when the income was obtained.

2.2. Methods for avoiding double taxation

In international practice, there are two concrete methods for avoiding double taxation: sparing and crediting. The difference between the two methods consists in the fact that while sparing refers to the income, crediting refers to tax. Starting from the provisions of article no 23, "Eliminating double taxation" from the OCDE Model Convention, with a view to avoiding double taxation of incomes of Romanian physical persons, the Romanian legislator takes also into account the methods foreseen in the conventions signed between Romanian and the foreign state, respectively the credit method or the sparing method, according to the case. Even if most of the times, in the Romanian fiscal legislation the method used for avoiding double taxation is ordinary crediting, by the latest modifications brought to the fiscal code, for incomes obtained from salaries we also take into account the sparing method. We must mention the fact that in some fiscal conventions signed by Romania there is not mentioned the crediting method as method used to avoid double taxation between the two signing parties/countries, and the settlements of conventions on avoiding double taxation prevail against the provisions of Romanian fiscal legislation. The following fiscal conventions signed by Romania with Albania, Alger, Austria, Belgium, Bulgaria, Croatia, Egypt, Luxemburg, Morocco, Moldavia, Slovakia and Ukraine are examples for this situation (Antonescu, Țuculină and Cojoacă 2001: 101).

According to the OCDE Model Convention the sparing principle can be applied by two main methods:

- total sparing method, according to which the state of residence of the income beneficiary will not take into account at determining the income subject to taxation, the income subject to taxation obtained by its resident in the source-state, so it ignores the incomes earned by the resident in the source-state;
- progressive sparing method, by which the income earned by the resident in the source-state is not subject to taxation in the state of residence, but it is taken into consideration when we determine the tax afferent to the rest of the income.

The crediting method is used within fiscal conventions in two forms:

- total crediting method- by this method, the state of residence totally deduces from the tax calculated on the total of incomes earned by the taxpayer (both in the state of residence and in the source-state), the tax paid in the source-state.
 - the method of ordinary crediting- consists in the deduction from the tax calculated on all the incomes earned by the taxpayer ((both in the state of residence and in the source-state), of an amount which can be equal to or lower than the amount effectively paid as tax in the source-state.
- Applying these methods is achieved only in the case in which the taxpayer will place in an annex to the declaration regarding the earned income the documents justifying the earned income and the paid tax, issued by the competent authority in the country where the income was obtained and with which Romania has signed a convention on avoiding double taxation.

2.3. Declarations

Romanian physical persons with their place of residence in Romania and physical persons who comply with the conditions of residence mentioned above, who obtain incomes from abroad, subject to taxation in Romania, as a result of the activity carried out abroad, will submit form no 201 "Declaration regarding the incomes earned abroad". In this situation, the declaration also represents a request of return of the tax on the wage incomes paid for the activity carried out abroad by an employer or in the name of a employer resident in Romania or by a permanent headquarters in Romania. The incomes obtained from the activity carried out abroad are declared for each source-country and for each category of earned income. With a view to filling in the

amounts in form 201, the amounts expressed in foreign currency will be translated into state currency at the annual average exchange rate of the currency market communicated by the National Bank of Romania, in the year for which the income was obtained.

The declaration is available at the fiscal agency and it is submitted:

- each year, till the 15th of May of the year following the one for which the income was earned;
- anytime the taxpayer notices errors in the previous declaration, by filling in rectifying declarations, situation in which he puts an "X" in a case especially foreseen in this aim.

It is filled in with capital letters by the taxpayer or by his representative in two copies:

- the original submitted to the fiscal agency;
- the copy is kept by the taxpayer.

3. Conclusions

Transferring staff or detaching personnel can generate fiscal problems that can become complex. That is why for the companies hiring employees it is important to know the fiscal implications that emerge in these situations. On the other hand, the legislator must take into account the observance of provisions of international treaties in which Romania is one of the parties, since these provisions prevail against internal legislation. From a fiscal point of view, the complexity of this issue regarding the taxation of incomes from activity carried out abroad originates in the fact that the fiscal authority must take into account the harmonization of provisions of internal legislation with the international fiscal settlements, respectively avoiding the phenomenon of double taxation of these incomes.

The elaboration of clear provisions in order to establish the way in which is attained taxation of incomes from wages earned abroad is essential, if we take into account the fact that each involved state tries to attract incomes to its budget. From our analysis, we can notice that the Model Convention and the Commentaries to this Model Convention serve as guidelines in interpreting internal legislation as far as taxation of revenues from abroad. Taking into account the lack of clear information that appear in practice regarding the taxation of wage incomes abroad, in the past few years there have been modified a series of legislative provisions regarding the way in which avoiding double taxation can be achieved, borrowing in internal legislation the methods for avoiding double taxation foreseen in the OCDE Model Convention. At the same time, there have been made improvements to the way in which the declaration and statement of wage incomes from abroad is done, by the introduction of new headings and columns that concern these incomes obtained abroad.

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COMPULSORY SOCIAL CONTRIBUTIONS REGULATED BY THE TAX CODE

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As of January 1st, 2004, the social contributions owed by natural persons with the capacity of employer, as well as the individual contributions owed by their insured are managed by the tax organs within the National Agency for Tax Administration, as they are bound, in the exercise of their attributions to apply the provisions of the special normative acts which used to regulate the social contributions.

As of January 1st, 2011, all the compulsory social contributions owed by the employers and assimilated to them, and to the insured for which they are bound to calculate, withdraw and transfer individual contributions, are regulated by the Tax Code. This measure has been imposed as a necessity to unify the calculation bases of individual contributions and social contributions owed by the employers. This measure also aimed at broadening the calculation base for social contributions and perfecting the collection by the method of stoppage at source. As a logical consequence of this measure, it was implemented that a single statement should be submitted regarding the payment obligations of social contributions, of income tax and the nominal records of natural persons with compulsory insurance in the social insurance systems.

This paper aims at emphasizing the categories of natural/legal persons with the capacity of taxpayer in the social insurance systems, and the establishment of the calculation base for social contributions. An emphasis will be placed on the exceptions from the inclusion in the calculation base of certain income, as the situations where the calculation base of social contributions is capped.

For the social contributions regulated by the Tax Code, the taxpayers are, as the case may be, resident/non-resident natural persons obtaining income from the activities carried out, natural and legal persons who pay the income of those persons and the public institutions calculating, detaining, paying and, as the case may be, bear, according to the statutory provisions, the compulsory social contributions, on behalf of the insured.

As a general rule, the calculation base for the social contributions is represented by the gross earnings achieved from the activity carried out, namely the income achieved according to the special statutory provisions.

The social contributions regulated by the Tax Code are the following:

- the individual contribution of social insurances and the contribution owed by the employer at the state social insurances budget;*
- the individual contribution of social health insurances and the contribution owed by the employer at the budget of the Unique National Fund for social health insurances;*
- the contribution for vacations and social health insurances and the contribution owed by the employer at the budget of the Unique National Fund for social health insurances;*
- the individual contribution at the unemployment insurance budget and the contribution owed by the employer to the unemployment insurance budget;*
- the contribution for insurance in case of labour accidents and professional diseases owed by the employer at the state social insurances budget;*
- the contribution to the Fund for granting the payment of salary receivables, owed by the natural and legal persons who have the capacity of employer.*

Key words: social contributions, social insurances, calculation base, gross earnings, nominal evidence

JEL Classification: H30, K34

In the social insurance systems, the **taxpayers** are, as the case may be:

- **resident natural persons** obtaining income from activities based on an individual labour agreement, of an employment relationship or a special statute provided by the law, as well as those obtaining income assimilated to salaries, as they are defined in the Tax Code;
- **non-resident natural persons** obtaining the above-mentioned income, while observing the provisions of international legal instruments of which Romania is a part;
- **persons obtaining professional income**, *others than the salaries*, namely income from copyright and related rights and/or activities from professional activities carried out on the grounds of agreement/conventions entered into according to the Civil Code for which there is an obligation of paying the individual contribution of social insurance and unemployment insurance;
- **the retired** with income from pensions exceeding 740 lei;
- **natural and legal persons who have the capacity of employers**, as well as the entities assimilated to the employer who have the capacity of income payers from dependent activities, both during the activity of resident or non-resident natural persons, and during the time in which they get vacations and indemnities for social health insurances;
- **public institutions** which calculate, detain, pay and, as the case may be, bear the compulsory social contributions, according to the statutory provisions, on behalf of the insured;
- **any payer** of income of the salary type or assimilated to salaries.

The individual compulsory social contributions are calculated on a monthly basis by applying the quotas provided by the law on the calculation base representing the **gross income earned**, including:

- **the income from salaries**, obtained by natural persons carrying out their activity on the grounds of an individual labour agreement or a special statute provided by the law. In the situation of the Romanian staff sent on a permanent mission abroad, the income from salaries comprise the basic salary corresponding to the positions on which those persons are employed in the country, where, as the case may be, increments and bonuses are added according to the law;
- **the indemnities** from activities carried out as a result of a **position of public dignity**, established according to the law;
- **the indemnities** from activities carried out as a result of a position chosen within the **non-profit legal persons**;
- **the rights** of monthly pay, indemnities, bonuses, premiums, increments and other rights of the **military staff**, granted according to the law;
- **the gross monthly indemnity**, as well as the **amount from the net profit**, owed *to the administrators* in national companies/enterprises, companies where the state or an authority of the local public administration is a controlling shareholder, as well as the autonomous administrations;
- **the remuneration** obtained by the **managers** on the grounds of a mandate agreement corresponding to the provisions of Companies Act.
- the amounts received by the **representatives in the general stockholders' assembly, in the board of directors meeting, the members of the management and the supervision council, as well as the censors commission**;
- the amounts received by the **representatives in tripartite organisms**, according to the law;
- the monthly **indemnity of the sole associate**;

- **the indemnity** of administrators, and the **income from the net profit**, owed to *the administrators* of companies according to the articles of association or established by the general stockholders' assembly;
- the amounts representing *salaries or differences of salaries established on the grounds of a ruling which remained final and binding*, as well as their *update* with the inflation index;
- the monthly **indemnities** paid according to the law by employers during *the period of non-competition*, established according to the individual labour agreement;
- **the indemnities** received *during the delegation or secondment* to another location, in the country and abroad, for business purposes, granted by non-profit legal persons and other entities which do not pay profit tax, *over the limit of 2.5 times the indemnity granted to employees in public institutions*;
- the **remuneration** received by the *president of the landlords' association or by other persons, on the grounds of the mandate agreement*, according to the law regarding the establishment, organization and operation of landlords' associations;
- *any other amounts of the salary type or advantages assimilated to salaries* for taxation purposes.

In case of taxpayers – *natural and legal persons who have the capacity of employers*, as well as the *entities assimilated to the employer who have the capacity of payers of income from dependant activities, and any payer of income of the salary type or assimilated to salaries* - the monthly calculation base for the social insurances contribution, the health insurance contribution, the unemployment insurance contribution, the contribution to the Fund granting the payment of salary receivables, the contribution for labour accidents and professional disease and the contribution for vacations and indemnities of social health insurances is represented by **the total amount of gross earnings** obtained by the resident/non-resident natural persons.

The law provides certain *limitations of the calculation base* for certain individual social contributions or social contributions owed by the employers.

The individual social insurances contribution, on each place where the income is obtained, cannot exceed the value of 5 times the average gross salary used at the substantiation of the budget of state social insurances and approved by the law of the budget of state social insurances.

The calculation base of the *contribution of social insurances owed by the employer* cannot exceed the multiplication product from the number of insured people for whom the employer owes differentiated contribution depending on the working conditions, from the month for which this contribution is calculated and the value corresponding to 5 times the average gross salary income.

At *the contribution for vacations and indemnities of social health insurances*, the monthly calculation base cannot exceed the multiplication product of the number of insured of the month for which the contribution is calculated and the value corresponding to 12 gross minimum income salaries at the level of the country granted in the payment.

At the *contribution of insurance for labour accidents and professional diseases*, the monthly calculation base is represented, as the case may be, also the minimum gross base salary at the level of the country granted in the payment, corresponding to the number of business days from the medical leave, except for the cases of labour accidents or professional disease.

During the period in which the resident/non-resident persons obtaining incomes from activities on the grounds of an individual labour agreement, of an employment relationship or a special statute provided by the law, as well as those getting medical leaves and indemnities of social health insurances, except for the cases of labour accidents or professional diseases, *the monthly calculation base for the social insurance contribution* owed to the budget of state social insurance is the amount representing 35% of the average gross salary income, corresponding to the number of business days in the medical leave.

For the persons **obtaining income of professional nature**, for which there is an obligation to pay the individual social insurances contribution and insurances for unemployment, the calculation base of the *individual social insurance contribution* and the *individual contribution for unemployment* is: for the income from copyright and related rights, the gross income diminished by the quota of lump sum expenses provided by the Tax Code; for the income from activities carried out on the grounds of the civil agreements/conventions, the gross income obtained.

For these persons, the payer of income assimilated to the employer *does not owe* the social insurance contribution and the contribution to the budget of unemployment insurances *in its capacity of employer*.

The contribution to the social health insurances is owed and it is also detained for the indemnities for temporary incapacity of work, granted as a result of a labour accident or a professional disease. The contribution to the social health insurances is borne by the employer or from the insurance fund for labour accidents and professional diseases established under the terms of the law.

No social contribution is owed for the following categories of income:

- the amounts received by the founding members of companies established by public subscription;
- the non-taxable incomes provided by the Tax Code, except for the rights to food granted by the employers to the employees and the income from salaries as a result of the activity for creating computer programs.
- food tickets, vacation tickets, gift tickets and day care tickets, granted according to the law;
- advantages received in relation to a dependant activity, such as: the use of any property, including a vehicle of any type, from the assets of the business, for personal purposes, except for the travelling round trips from the address of residence to the place of work; accommodation, food, clothing, the staff for domestic work, as well as other property or services provided on a free basis or at a price lower than the market price; the subscriptions and the cost of phone conversations, including phone cards, for personal use; the travel permits by any means of transportation, used for personal purposes; insurance premiums paid by the supporter for its own employees or another beneficiary of salary incomes, at the moment that premium is paid, other than the compulsory ones.

For certain income obtained by natural persons compulsorily insured by law, the lawmaker provided certain **exceptions from the payment of individual contributions and/or contributions owed by the income payers**.

Thus, *the individual contribution of social insurances and the contribution owed by the employer at the state social insurances budget* are not required for the following income:

- the amount owed for the participation of the employees to the profit;
- the session indemnities for local and county counsellors;
- benefits in the form of the employer bearing the contributions paid at the facultative pension funds, within the limits of deductibility established according to the law;
- the gross monthly indemnity, as well as the amount from the net profit, owed to the administrators in national companies/enterprises, companies where the state or an authority of the local public administration is a controlling shareholder, as well as the autonomous administrations;
- the indemnity of administrators, and the income from the net profit, owed to the administrators of companies according to the articles of association or established by the general stockholders' assembly;
- the services borne from the budget of state social insurances, including those for labour accidents and professional diseases.

No ***insurance contribution for labour accidents and professional diseases is owed*** by the employers in the defence institutions, public order and national safety institutions, as well as the institutions in the suborder of the National Administration of Penitentiaries and the General Directorate for Protection and Anticorruption, both for the military staff and the civil staff employed on the grounds of an agreement.

The insurance contribution for labour accidents and professional diseases owed by the employer is not calculated for the following income:

- the amount owed for the participation of the employees to the profit;
- the session indemnities for local and county counsellors;
- benefits in the form of the employer bearing the contributions paid at the facultative pension funds, within the limits of deductibility established according to the law;
- the gross monthly indemnity, as well as the amount from the net profit, owed to the administrators in national companies/enterprises, companies where the state or an authority of the local public administration is a controlling shareholder, as well as the autonomous administrations;
- the indemnity of administrators, and the income from the net profit, owed to the administrators of companies according to the articles of association or established by the general stockholders' assembly;
- the services borne from the budget of state social insurances, including those for labour accidents and professional diseases.

The contribution for vacations and indemnities of social health insurances owed by the employer is not calculated for the following income:

- the rights of monthly pay, indemnities, bonuses, premiums, increments and other rights of the active military staff and those of civil servants with a special statute, granted according to the law;
- the amounts received by the representatives in the general stockholders' assembly, in the board of directors meeting, the members of the management and the supervision council, as well as the censors commission;
- the amounts received by the representatives in tripartite organisms, according to the law;
- the monthly indemnity of the sole associate;
- the amount from the net income, owed to the administrators of companies according to the articles of association or established by the general stockholders' assembly;
- the monthly indemnities paid according to the law by employers during the period of non-competition, established according to the individual labour agreement;
- the indemnities received during the delegation or secondment to another location, in the country and abroad, for business purposes, granted by non-profit legal persons and other entities which do not pay profit tax, over the limit of 2.5 times the indemnity granted to employees in public institutions;
- the remuneration received by the president of the landlords' association or by other persons, on the grounds of the mandate agreement, according to the law regarding the establishment, organization and operation of landlords' associations;
- the income representing compensatory payments borne by the employers, according to the collective labour agreement, obtained by the natural persons who are not in legal relations with the employers;
- the session indemnities received by the local and county counsellors;

The individual contribution of unemployment insurances and the contribution owed by the employer to the state social insurances budget are not required for the following income:

- the income in cash and/or in kind granted to retired persons;

- the rights of monthly pay, indemnities, bonuses, premiums, increments and other rights of the military staff, granted according to the law;
- the gross monthly indemnity, as well as the amount from the net profit, owed to the administrators in national companies/enterprises, companies where the state or an authority of the local public administration is a controlling shareholder, as well as the autonomous administrations;
- the monthly indemnity of the sole associate;
- the indemnity of administrators, and the income from the net profit, owed to the administrators of companies according to the articles of association or established by the general stockholders' assembly;
- the monthly indemnities paid according to the law by employers during the period of non-competition, established according to the individual labour agreement;
- the remuneration received by the president of the landlords' association or by other persons, on the grounds of the mandate agreement, according to the law regarding the establishment, organization and operation of landlords' associations;
- the amounts received by the representatives in the general stockholders' assembly, in the board of directors meeting, the members of the management and the supervision council, as well as the censors commission;
- the compensations granted, under the terms of the law or those of the collective or individual labour agreement, to the persons dismissed for reasons beyond themselves or who, according to the law, are discharged or go in retreat;
- the income obtained by the natural persons who are not in legal relations with their employers anymore, but they cash in revenues as a result of the fact that they had legal relations with them and those revenues are granted, according to the law, subsequently to the termination of the legal relations, except for the amounts representing the salaries, differences of salaries, income assimilated to salaries or differences of income assimilated to salaries, on which there is an obligation of paying the insurance contribution for unemployment established on the grounds of a final and binding ruling, as well as their update with the inflation index;
- the services borne from the budget of state social insurances, the Unique National Fund for health Insurances, including those granted for labour accidents and professional diseases.
- the income granted according to the statutory provisions in the form of participation of the employees to the profit;
- the amounts received by the representatives in the board of directors meetings, the consultative councils and the commissions established according to the law;
- the session indemnities for local and county counsellors;

During the time in which the employment or work relations are suspended, according to the law, Except for the period of temporary incapacity of work in which the payment of the indemnity is borne by the company, no unemployment insurance contribution is owed.

CONCLUSIONS:

Although a certain harmonization of the calculation bases has been attempted for social contributions and for the income from salaries, there are noteworthy differences between the categories of income which are included in the calculation base of the income tax and the calculations bases of social contributions. The regulation of social contributions by the Tax Code provided the creation of a unitary legislative framework with respect to the definition of the incomes, for which there is an obligation of calculation, deduction, payment and declaration of social contributions and income tax, according to the provisions of the Tax Code, the taxpayer no longer has to identify the legal base from various regulations.

Moreover, a calculation base is established, which comprises mostly the same categories of income and meets the conditions for granting the services provided to insured persons.

The implementation of the "Unique Statement" provides the integration of the flows of information between the National Agency for Tax Administration, which has among its attributions to collect tax liabilities and the Social Insurance Houses, which according to the statutory provisions, administer the social insurance systems and provide the social services to the insured people. By means of this statement, both the payment liabilities to the budgets of social insurances and special funds are declared, and the individual statement of the persons who are not insured in the social insurance systems, statement which will be submitted at a single institution.

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THE FINANCIAL CRISIS AND ITS IMPLICATIONS ON THE PUBLIC DEFICIT OF THE EU COUNTRIES

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In this paper, the authors make an analysis of the second wave of the actual World Financial Crisis. They present the consequences of the first wave of the World Financial Crisis, namely the Banking Crisis, on the EU countries public debts.

Key words: analysis, crisis, public debts, EU

JEL Classification: G30

1. European Bailout Plan

The first wave of the global financial crisis consisted of a deep crisis within the international banking system caused by mortgage contracts. The devastating effects of this first wave were only delayed - not eliminated - by states interventions through state bailouts given to banks in difficulty. To mitigate the effects of this crisis, the European Bailout Plan was passed in 2008 within the EU Zone, which in summary provided the following:

- Any financial support had to be given on time and it was temporary;
- Taxpayers interests had to be protected;
- Remaining shareholders had to deal with governmental interventions;
- Governments were free to change companies management when necessary;
- Governments were entitled to changing banking wage policies;
- Stipulations relating to EU Bailout Plan had to be followed as stated;
- No secondary effects on other UE members were allowed.

Besides the bailout amount of 1465 billion Euros, the EU Bailout Plan also stipulated that bailed banks could not give dividends to investors until the total amount received by them was returned to the governments. Moreover, governments had the right to be represented on the board of directors of bailed banks by special observers. As a consequence of the above stipulations, European stock markets fell the very next day this plan was approved.

There were also some exceptions. Many French banks like Credit Agricole or BNP Parisbas refused governmental help because of its interfering role in bank management. Other banks accepted the bailout plan, as following: Barclay's (UK): 1.62 billion £; Royal Bank of Scotland (UK): 5 billion £; Fortis (The Netherlands/Belgium): 11.2 billion €; Dexia (France/Belgium): 6.4 billion €; Hypo Real Estate (Germany): 35 billion €.

This bailout given to banks by EU states was misunderstood by them, for several reasons, among which the following:

- When banks know that the state will support them during crises, they can afford to take bigger risks.
- Without more regulation, banks are driven to increase their returns by taking bigger risks.
- When banks gain huge amounts of money, they keep the profits; when banks lose, it is the state that pays.

Looking back, one can see that the European public has discovered an interesting fact: the 2008-2009 fiscal stimulus programs, which were aimed at forestalling an even greater crisis, generated more debts than jobs. By analyzing this situation, one conclusion arises: cheap money (through cost and high liquidity levels) has deepened the crisis.

2. It's all in the history

Recent past history showed, on one hand, the financial crisis deepened the problems of several European countries because of the monetary and financial structures of the Euro zone. On the other hand, the crisis resulted in extreme shortage of liquidity for European banks. During 2007-2008, banks of core Euro zone countries (**Germany, France, The Netherlands, Belgium**) continued to lend to peripheral countries (Italy, Spain, Ireland, Greece, Portugal). Gross cross-border claims from core to periphery reached 1.5 trillion Euros in 2008, representing almost three times the capital of core banks.

The European Central Bank (ECB) intervened, lending freely and making it possible for banks to start dealing with their weak position. Also, the ECB reaction was very different in 2009 when states were facing growing borrowing needs due to the crisis. The ECB watched as interest rates rose, financial institutions speculated against state debt, and state bankruptcy raised its head. In such a difficult financial environment, the Euro zone left each state to defend itself in the financial markets.

When looking closer at the above mentioned time line, the following can be stated: The financial crisis has been followed by a wave of governmental defaults on public debt obligations; The financial crisis has led to, or exacerbated, sharp economic downturns, low government revenues, widening government deficits, and high levels of debt, pushing many governments into default; As recovery from the global financial crisis begins, the global recession endures, at some point to the threat of a second wave of the crisis: **sovereign debt crisis**.

3. Sovereign debt crises

In a financial crisis, government spending increases dramatically in the attempt to stabilize the financial system and stimulate economic activity. Hence, tax revenues fall, fiscal surpluses turn into deficits and existing deficits increase. Because of the difficult financial situation, all sixteen members of the European Monetary Union (EMU) have violated treaty limits on allowable budget deficits (some more than four times). Moreover, the leading economies of the world have all seen their deficits shoot higher, some to record levels.

Among all the obstacles, there is a certainty: when economies are contracting or even grow slowly, bringing these deficits back down to earth, the situation turns into an unenviable challenge. Governments have to survive by turning to the markets. Then those increased deficits turn into growing debt loads. When debt reaches 80 percent of the GDP threshold, the borrowing costs for governments start ticking higher and so does the market scrutiny. Related to this topic and in the attempt to warn financial markets, the IMF stated in 2010 that five of the top seven developed countries in the world would have debt levels exceeding 100 percent of GDP during the next four years.

If deficits and debts rise and economic activity appears unlikely to solve fiscal problems, the creditworthiness of the government falls under intense scrutiny. That's when downgrades appear. This is the situation many countries around the world had to face in 2009 and 2010, when the

sovereign debt crises burst. Greece's sovereign debt rating has been downgraded to *junk* status. Spain has lost its AAA rating. UK could have lost its AAA status if its deficit would not have been addressed. Across the ocean, Japan's outlook has been cut to negative and rating agencies have even warned the U.S.

In such an environment, when investors see more risk, they require more return. Therefore, the borrowing costs for troubled countries rises. Then, it becomes harder to finance spending needs and harder to finance existing debt. That's when defaults show up. Unless governments can **demonstrate** they're willing to take tough steps to reign in debt, crisis can spread quickly.

4. Public deficit, nowadays problem in the EU

Regarding the issue of the EU public deficit, it must be stated that this economic phenomenon is accepted within the union until it exceeds values stated in documents like: Maastricht Treaty (1992); Stability and Growth Pact (1997).

According to the Maastricht Treaty, countries have to meet several convergence criteria, among which the following:

- An inflation rate no more than 1.5% higher than the average of the three lowest inflation rates of EU member states over the previous year;
- Long-term interest rates must not exceed by more than 2% the lowest inflation rates of EU countries over the previous year;
- The Member State is required to join the exchange-rate mechanism (ERM II) for two consecutive years before entering the Euro zone and it should not have devalued its currency during the period;
- A government budget deficit must not exceed 3% of each country's GDP at the end of the preceding fiscal year;
- A gross debt to GDP ratio must not exceed 60% at the end of the preceding fiscal year.

On the other hand, the Stability and Growth Pact (1997) provided:

- mechanisms for multilateral surveillance and enforcement;
- stated that budgetary positions should normally be "close to balance or in surplus";
- if requirements are broken, EU can apply a fine of 0.5 % of the GDP to its members.

To comply with the provisions of the two treaties, EU members had to impose a strict budget discipline, because the budget positions of some countries pose a risk for the sustainability of the public finances of these countries and of the European Monetary Union (EMU) as a whole. Moreover, the national fiscal policies of EU members were strictly subordinated to the inflation target of the European Central Bank. Also, the national governments were obliged to meet rigid parameters and could not use fiscal policies freely to increase growth and employment.

Nevertheless, since the financial meltdown has begun, 20 EU countries (among which all 16 of the EMU's members) have been guilty of excessive spending. During all this period, European governments were and still are struggling to rein in deficits after the worst downturn since World War II. The table below presents some data concerning the amount of deficits:

Table no. 1 Budgetary Deficit/GDP

COUNTRY	2007	2008	2009
Ireland	0.1	-7.3	-14.3
Greece	-5.1	-7.7	-13.6
United Kingdom	-2.8	-4.9	-11.5
Spain	1.9	-4.1	-11.2
Portugal	-2.6	-2.8	-9.4
Iceland	5.4	-13.5	-9.1
Latvia	-0.3	-4.1	-9
Lithuania	-1	-3.3	-8.9
Romania	-2.5	-5.4	-8.3
France	-2.7	-3.3	-7.5
Netherlands	0.2	0.7	-5.3
Hungary	-5	-3.8	-4
Bulgaria	0.1	1.8	-3.9
Malta	-2.2	-4.5	-3.8

Source: Eurostat data

As it can be seen, twenty member countries are facing EU deadlines to get their budgets back in shape. They are all deemed crucial to economic stability and growth as the EU claws back from recession. A review of the situation in Hungary, Latvia, Lithuania and Malta shows all four countries have taken adequate steps to narrow their deficits. There are requests that Malta and Lithuania are granted another 1 and 2 years to get back in shape.

Most analysts stated that in 2010 unemployment rate in the EU would reach the level of 10.25% and the public deficit would be 7.5% of EU GDP. In 2009 budget shortfalls of two or three times the EU limit would have been unthinkable in most countries. Because many countries have exceeding deficits, the EU Commission proposed deadlines to reduce gaps. Here are some examples:

- Hungary met its 2009 deficit target of 3.9% of GDP. It has until 2011 to bring its deficit below 3%.

- Latvia ended 2009 with a deficit projected at just below 10% of GDP, as recommended by the EU. The target for 2010 was 8.5%.

- 13 countries were given 2-5 years to reinstate fiscal discipline: Italy, Belgium (until 2012); Germany, France, Spain, Austria, the Netherlands, the Czech Republic, Slovakia, Slovenia, Portugal (until 2013); Ireland (until 2014); UK (until 2014-2015).

The significant indicator for any country is Gross Debt to GDP Ratio, which has deteriorated strongly due to recession, stimulus, capital injection in banks, and reached dangerous levels in 2010 for the balance of European economies, as it follows: Greece 115%; Italy 116%; Belgium 97.2%; UK 78.7%; Portugal 77.4%, France 76.1%; Germany 72.1%; Austria 69.1%; Ireland 64%, Finland 41.3%. Many analysts think that the problem in today's Europe is due to a natural evolution of things and that the evolution of the financial crisis follows this pattern: over

indebtedness was shifted from home buyers on to banks, then transferred to governments (e.g. the recent sovereign debt crisis in Greece is only a natural development of things).

To prevent amplification of budgetary problems and their propagation in the EU, the 27 EU states have to reduce public deficit and have received guidelines from the EU to achieve this goal within 2011-2014.

5. The situation of Greece, “Achilles Heel of the EU”

Greece has accumulated high levels of debt during the decade before the crisis, when capital markets were highly liquid. As the crisis has unfolded, and capital markets have become more illiquid, Greece may no longer be able to roll over its maturing debt obligations. Some analysts have discussed the possibility of a Greek default. Greece has relied heavily on external financing for funding the budget. Between 2001, when it adopted the euro as its currency, and 2008, Greece’s reported budget deficits averaged 5% per year, compared to a Euro-zone average of 2%. Its current account deficits averaged 9% per year, compared to a Euro-zone average of 1%.

The causes of financial crisis in Greece can be grouped into two categories, namely:

- *Domestic causes*: high government spending of successive Greek governments; weak revenue collection; structural rigidities in Greece’s economy.
- *International causes*: access to capital at low interest rates after adopting the Euro; weak enforcement of EU rules concerning debt and deficit ceilings facilitated Greece’s ability to accumulate high levels of external debt.

To prevent the entry of Greece into collapse, Euro-zone countries and the International Monetary Fund, seeking to halt a widening European debt crisis that has threatened the stability of the Euro, agreed to extend Greece an unprecedented €110 billion (\$147 billion) rescue in return for Draconian budget cuts. Germany, whose population has been deeply sceptical of a bailout, bore the largest share of the Euro-zone contribution, namely €22.3 billion of the total amount. The Euro-zone loans carry an interest rate of about 5%, compared to about 3% for the IMF contribution. Some €10 billion will be set aside as “bank stabilization” fund for use if the condition of Greek financial institutions worsens.

The Greek government has promised to slash and then freeze public sector wages, raise sin taxes, increase value-added taxes, impose a new levy on businesses, cut pension payments and increase retirement ages for some public-sector workers. The steps are expected to save the state €30 billion through 2013. Thus, the Greek government has adopted the following measures:

- Public sector limit of €1,000 introduced to bi-annual bonus, abolished entirely for those earning over €3,000 a month;
- An 8% cut on public sector allowances and a 3% pay cut for DEKO (public sector utilities) employees;
- Limit of €800 per month to 13th and 14th monthly pension instalments; abolished for pensioners receiving over €2,500 a month;
- Return of a special tax on high pensions;
- Changes concerning laws governing lay-offs and overtime payment;
- Extraordinary taxes imposed on company profits;
- Increases in VAT to 23%, 11% and 5.5%.
- 10% rise in luxury taxes and taxes on alcohol, cigarettes, and fuel;
- Equalization of men and women pension age limits;
- General pension age has not been changed, but a mechanism has been introduced to scale them to life expectancy changes;
- Average retirement age for public sector workers has increased from 61 to 65;
- Public-owned companies to be reduced from 6,000 to 2,000.

Only the nearest future will show whether these harsh methods have generated the appropriate results.

6. Broader implications of Greece crisis: Spillover Effect

During the last two years, there were several concerns that Greece's crisis could spill over to other European countries in difficult economic positions, including Portugal, Ireland, Italy, and Spain. European authorities warned that debt programs in Greece and other high deficit countries such as Spain, Portugal, Ireland and even Italy may affect stronger European countries. Greece's foreign policy focus on the region and growing trade volumes between neighbour countries like Serbia, Albania, Macedonia, Romania, Bulgaria and Turkey could not remain indifferent to the magnitude of the crisis next door.

All their concerns were entirely justifiable. PIIGS ZONE, that is Portugal, Ireland, Italy, Greece, Spain, borrowed heavily during the credit bubble. Some argued that the spillover effect could appear in Europe just as it appeared in Asia, where investors' herding behaviour contributed to the spillover of Asian financial crisis (1997-1998). Others argued the spillover hypothesis was unlikely to happen: the low levels of national savings in Greece and Portugal put these countries in the weakest financial position, at 7.2% of GDP and 10.2% of GDP respectively, compared to an EU average of approximately 20%. Spain and Ireland, by contrast, were closer to the EU average at 19% of GDP and 17% of GDP, respectively, putting them in a stronger financial position.

Two macroeconomic indicators were significant for the evolution of these countries, namely: government expenditure as percent of GDP and government consolidated gross debt as percent of GDP. The figures for each country were as following: Portugal: spending 51%; debt 77%; Ireland: spending 48%; debt 64%; Italy: spending 52%; debt 116%; Greece: spending 50%; debt 116%; Spain: spending 46%; debt 53%.

7. Conclusions

All in all, when referring to the implications of the world financial crisis on the European public deficit, it can be stated that the bubble disease has spread to the whole financial system, making governments to bail banks and acquire liabilities. Although liabilities are necessary, borrowing more to satisfy previous debt obligation will only delay the problem, not solve it. Nowadays, it's too early to measure the effectiveness of the bailout plan for the Euro-zone. In our view, time is the best solution to the debt problem. Giving it 5-8 years, reducing spending and increasing saving to pay down the debts is the most pragmatic way of solving it.

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THE OPPORTUNITIES AND CHALLENGES OF MICROINSURANCE

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Microinsurance is a term increasingly used to refer to insurance characterized by low premium and low caps or low coverage limits, sold as part of a typical risk-pooling and marketing arrangements, and designed to service low-income people and businesses not served by typical social or commercial insurance schemes.

As a relatively new field, few studies evaluating the impact of microinsurance projects exist. Of these, even fewer have a rigorous methodology leading to reliable results.

Our research aimed to:

- examine the viability of microinsurance as a mechanism of risk transfer and tool for risk management in developing countries;*
- provide a state of the art analysis of microinsurance for a better understanding of currently operational microinsurance schemes;*
- reflect on the opportunities and challenges of microinsurance in developing countries, highlighting both the potential benefits and limitations of microinsurance as an instrument for transferring risk;*
- consider the interests and perspectives of different stakeholders and the incentives and disincentives for participating and investing in a micro-insurance scheme;*
- enhance dialogue and collaboration on this topic between and within the commercial insurance sector and the disaster risk reduction communities;*
- assess the opportunity of introducing microinsurance in Romania.*

Reflecting on the opportunities and challenges of introducing microinsurance in Romania, there is absolutely necessary to understand both the supply side (current insurance market) and the demand side (risks faced by low-income persons and the coping strategies used to manage these risks). The majority of the primary research was conducted on-site in Romania, in Oradea and its environs, during the month of December 2010. Qualitative research techniques were utilized, including focus group discussions (FGD) and guided individual interviews with members of both the public and private sector, as well as with international non-governmental organizations, such as the World Bank, and IMF.

The research revealed the main risks faced by low-income households, and the fact that microinsurance is a mostly unknown concept in Romania. There is a clear need and demand for microinsurance in Romania. The potential market is estimated to include approximately 4.3 million persons in 2008.

Keywords: microinsurance, microfinance, low-income, direct sales, performance

JEL Code: G22

1. Definitions of microinsurance

Microinsurance is part of the broader concept of microfinance, which includes a variety of “micro” financial services targeted to lower-income households.

In definition, microinsurance is not very different from traditional insurance, except that it targets a different segment of a population. In reality, however, this entails an entirely different way of thinking about insurance: new, simpler products, alternative distribution channels and marketing instruments, as well as a focus on efficient operations.

Microinsurance is a financial arrangement to protect low-income people against specific perils in exchange for regular premium payments proportionate to the likelihood and cost of the risk involved (Churchill C. 2006: 2).

This definition is essentially the same as one might use for regular insurance, except for the clearly prescribed market: low-income people.

The author of this definition adds that microinsurance does not refer to: (i) the size of the risk-carrier (some are small and even informal, others very large companies); (ii) the scope of the risk (the risks themselves are by no means "micro" to the households that experience them); (iii) the delivery channel: it can be delivered through a variety of different channels, including small community-based schemes, credit unions or other types of microfinance institutions, but also by enormous multinational insurance companies, etc.

Though the concept of microinsurance is gaining in popularity across the globe, there is no commonly accepted definition. We can define microinsurance by the following characteristics:

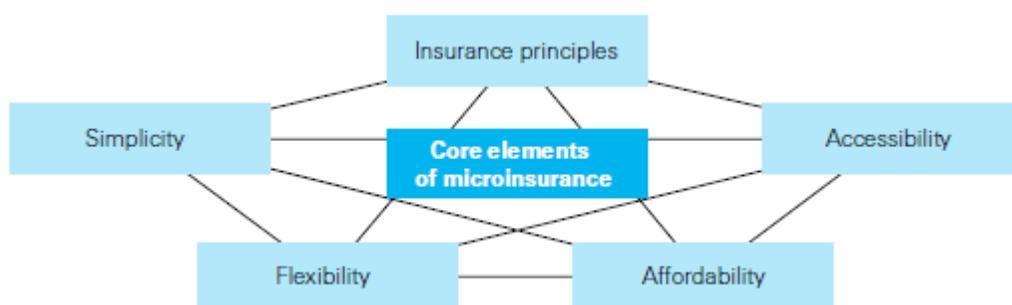


Figure 1. Core elements /characteristics of microinsurance

Source: Swiss Re Sigma No.6/2010 –“Microinsurance-risk protection for 4 billion people”, p.2

Insurance principles: it is based on insurance principles and involves payment of premiums by the policyholders (or on the policyholder’s behalf by governments, developmental agencies) in exchange of the promise of indemnification by the insurer in the event of covered loss.

Accessibility: Microinsurance targets the segment of society with low and instable income who would not otherwise be able to afford conventional insurance.

Affordability: Premiums and coverage are kept at a low level in order to make products affordable for the target population. Premium subsidies provided by governments or developmental agencies also help to ensure products are affordable.

Flexibility: Since the low-income segment of the society is not homogenous cluster, microinsurance products require customization to meet the community requirements in a effective way. For instance, premium collections, can be tailored to suit the irregular income stream of policyholders.

Simplicity: Microinsurance should be structured simply in terms of product design, underwriting conditions, premiums collection, policy language and claims handling. This takes into consideration the lack of actuarial data in many cases and help to make the products easy to understand and more acceptable.

The low-income households are facing the following main risks by: death or serious illness of a breadwinner, loss of the year’s harvest due to natural disaster, and property loss.

2. Microinsurance delivery models

Methods and models for delivering microinsurance products depend on the organization, institution, and provider involved. In general, there are four main methods for offering microinsurance. Each of these models has their own advantages and disadvantages.

-Partner agent model

A partnership is formed between the micro-insurance scheme and an agent (insurance company, microfinance institution, donor, etc.), and in some cases a third-party healthcare provider. The micro-insurance scheme is responsible for the delivery and marketing of products to the clients, while the agent retains all responsibility for design and development. In this model, micro-insurance schemes benefit from limited risk, but are also disadvantaged in their limited control.

-Full service model

The micro-insurance scheme is in charge of everything; both the design and delivery of products to the clients, working with external healthcare providers to provide the services. This model has the advantage of offering micro-insurance schemes full control, yet the disadvantage of higher risks.

-Provider-driven model

The healthcare provider is the micro-insurance scheme, and similar to the full-service model, is responsible for all operations, delivery, design, and service. There is an advantage once more in the amount of control retained, yet disadvantage in the limitations on products and services.

-Community-based/mutual model

The policyholders or clients are in charge, managing and owning the operations, and working with external healthcare providers to offer services. This model is advantageous for its ability to design and market products more easily and effectively, yet is disadvantaged by its small size and scope of operations.

3.The microinsurance market

A range of players and institutions are involved in the microinsurance supply chain. They include insurance regulators, risk carriers, administrators, delivery channels, technology platforms, and related service providers. The risk carriers are mainly comprised of insurance providers, including private and public insurers, non-governmental organizations, mutuals and community organisations

The microinsurance market can be categorized in two broad segments, based on the consumption level of the people and their ability to afford premiums (Re Sigma No.6/2010 : 9). Those living above the international poverty line of 1,25 USD/day, and up to 4 USD/day represent the target market segment for the commercially viable microinsurance. For this group, it is possible to have an independent market-based approach, whereby microinsurance products are sold at a price that is still affordable to the clients, but also commercial sustainable.

The other segment is at the bottom of the income pyramid, which includes people living below 1,25 USD/day, also referred to us as the extremely poor population. The population falling into this category earn so little that they find it hard to afford even basic necessities for their families, let alone the cost of commercially viable micro-insurance products. However there are other approaches to extend social protection and micro insurance programs to this group. For instance, government can introduce large scale social security measures on their own or subsidise microinsurance premiums through public private partnership programmes.

It is estimated that 2,6 billion people fall in the range of 1,25 USD/day and 4 USD/day (Re Sigma No.6/2010 : 9). This is the potential target for various commercially viable microinsurance products. On the other hand, some 1,4 billion people live on less than 1,25 USD/day and require support from governments and developmental agencies to access microinsurance products. In total, up to 4 billion people can potentially benefit from microinsurance and/or public private partnership. This translates into 2 to 3 billions policies insurance products. In USD terms, the

potential market is valued up to USD 40 billion. The current market size, however is far less. It is estimated that the current penetration of the microinsurance is close to 2%-3% of the potential market, which translates into around USD 0,8-1,2 billion of direct premium.

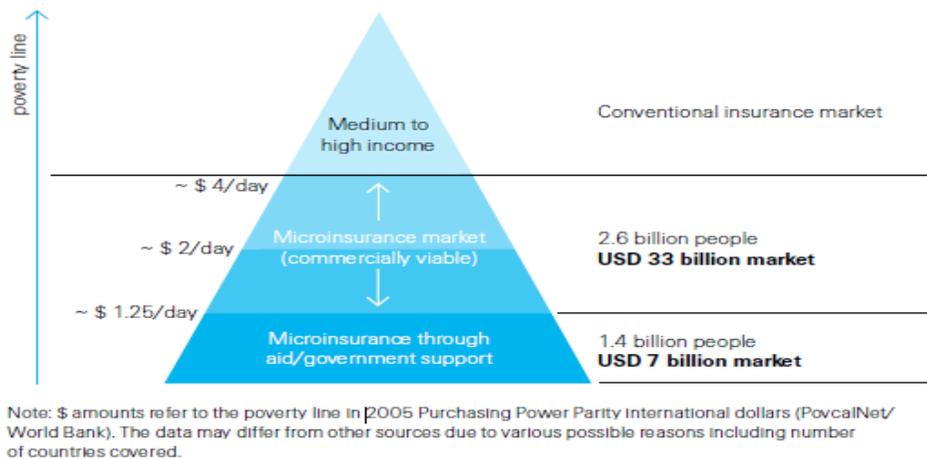


Figure 2. Potential market estimates of the global microinsurance market

Source: Swiss Re Sigma No.6/2010 –“Microinsurance-risk protection for 4 billion people”, p.9

South Asia has the lowest ratio of low-income individuals living under \$4/day to the total population. The entire Asia-Pacific region represents 70% of the world’s low-income population.

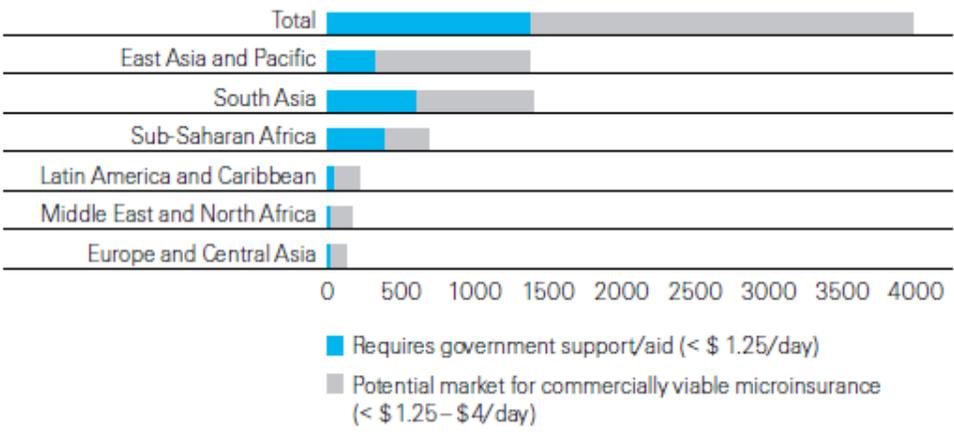


Figure 3. Low income population by region (data in millions)

Source: Swiss Re Sigma No.6/2010 –“Microinsurance-risk protection for 4 billion people”, p.10

Sub-Saharan Africa along with the Middle East and North Africa are the next major regional markets with 865 million low-income individuals. Latin America and Caribbean, where microinsurance is much more developed compared to Africa , accounted for some 5% of the

low-income population. The incidence of extreme poverty is highest in a South Asia and Sub-Saharan Africa, totaling almost a billion people.

The concept of microinsurance is relatively new in Central and Eastern Europe(CEE) and Turkey, even though there are an estimated 73 million people living under \$4. The five markets (The Russian Federation, Turkey, Romania, Ukraine and Poland), account for nearly 90% of the low income population in the region, and can be considered major markets for microinsurance products. Moldova and Albania, on the other hand have the highest proportion of low-income population, with 4 million people.

4.The oportunity of introducing microinsurance in Romania

The purpose of the present study was to assess the oportunity of introducing microinsurance in Romania. To address this key question, an understanding of both the supply side (current insurance market) and the demand side (risks faced by low-income persons and the coping strategies used to manage these risks) was necessary. The majority of the primary research was conducted on-site in Romania, in Oradea and its environs, during the month of December 2010. Qualitative research techniques were utilized, including focus group discussions (FGD) and guided individual interviews with members of both the public and private sector, as well as with international non-governmental organizations, such as the World Bank, and IMF.

In Romania it is estimated that 4,19 million people fall in the range of 1,25 USD/day and 4 USD/day in 2008, conform to Development Research Group of the World Bank(World Bank). This is the potential target for various commercially viable microinsurance products. On the other hand, some 0,11 million people live on less than 1,25 USD/day and require support from governments and developmental agencies to access microinsurance products. In total, up to 4,3 milion people can potentially benefit from micoinurance and/or public private partnership.

The research revealed the following main risks faced by low-income households: death or serious illness of a breadwinner, loss of the year's harvest due to natural disaster, and property loss. Currently, most households use self-insurance and informal insurance as their primary risk management tools; savings and the purchase of fixed assets are utilized ex-ante, while borrowing or migrating for work are used to cover expenses ex-post. Clearly, the effectiveness of such strategies is limited.

However, most low-income persons do not currently consider insurance as a viable risk management alternative. There are many ways to explain this: firstly, there is a lack of financial education among the population about the purpose and benefits of insurance. Secondly, there is a widespread lack of trust in institutions. In addition, most low-income households feel they do not have sufficient financial resources, perceiving insurance as an "extra" or even "wasteful" expense, or as a luxury product. Finally, most insurance firms do not offer any products targeted to the lower-income population, nor are making a marked effort to reach out to this segment.

Currently, most insurance firms offer a traditional product range, many relying on automobile and other compulsory insurances. Direct sales through intermediaries (agents and brokers) is very common, and marketing is primarily executed through traditional mass media (television, radio, print advertising). One of the main issues with the current product offering is that most products are not affordable, but also payment is required in full and upfront.

Microinsurance is a mostly unknown concept in Romania. There is no specific microinsurance legislation, although the government has expressed openness to the possibility of developing one in the future. Microfinance, however, is quite well-developed and regulated, which is often a pre-requisite for the successful launch of microinsurance into a new market.

5. Conclusions

Microinsurance supports the insurance sector's long-term development. With favorable trends, such as rising personal and household income, improving economic fundamentals and increased efforts on poverty reduction, it is expected that a high percentage of the low-income households will move into the middle income segment in the near future. This socio-economic transformation will offer huge business opportunities to the financial services industry.

There is a clear need and demand for microinsurance in Romania. The potential market is estimated to include approximately 4.3 million persons in 2008 conform to Development Research Group of the World Bank(World Bank). A microinsurance product would need to offer both quality and flexibility, at a reasonable cost and with a flexible payment plan. The recommended microinsurance products which are addressing to the low-income persons in Romania are personal accident, credit life, agriculture and property insurance. Furthermore, trustworthy and far-reaching distribution channels which would reliably provide access to the maximum number of people is important. For Romania, the recommended distribution channels are microfinance institutions and SCAs.

Premium payments and claims disbursements could also be handled through the Post Office, which has the widest and most accessible branch network of any institution in Romania. For operations, the partnership model is recommended, whereby Zurich would liaise with an on-site partner, who would in turn coordinate the respective delivery channels and manage regulatory compliance.

Finally, investment in financial education is necessary for the success of microinsurance. Raising the financial education and helping to build an insurance culture fosters a favorable environment for all parties involved – buyers and suppliers. Therefore, it is recommended that educational programs be implemented in collaboration with the government as well as international organizations, trade associations and rural organizations.

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THE LEGAL INDEBTEDNESS CAPACITY OF ROMANIAN LOCAL GOVERNMENTS – THEORETICAL AND EMPIRICAL EVIDENCES

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The factual, not only formal capacity of local governments to appeal to borrowed resources is, considering the current conditions, a prerequisite for ensuring economic and social development of local communities. In this paper we intend to position the main theoretical and empirical evidences on local governments' indebtedness capacity, mainly focusing on its sizing according to Romanian regulatory framework. With respect to previous research, the issue approached is one of great interest as it has not been, in the Romanian literature on local public finances, subject to a separate analysis of proportions.

The undertaken analysis comprises a quantitative dimension, based on processed data from the consolidated general budget of Romanian local governments for 2007-2009, in permanent conjunction with monitoring and analysis of the involved qualitative aspects. To ensure the relevance of the research results, the analysis undertaken refers to the legal framework in function throughout the considered period of time, without involving the legislative changes operated in mid-2010.

The main conclusions drawn from our analysis indicate that, considering the current Romanian socio-economic environment, under the impact of specific factors of different nature, the legal indebtedness capacity is far from being well valued, thus bringing its benefits to local communities development. This conclusion is valid from a global perspective as well as for different types of local communities. This appears to be inconsistent with the permanently claimed need to fund important local public investments, mainly in infrastructure, indicating, despite the high legal indebtedness capacity, the lack of factual access to borrowed resources.

We suggest, therefore, to introduce the concept of effective indebtedness capacity, the result of a particularized correlation for different local governments between legal indebtedness capacity and the manifestation of several factors with specific action and we intend to contribute, by future research, to its measurement.

Keywords: legal indebtedness capacity, effective indebtedness capacity, local governments, local public debt, local autonomy

JEL Codes: H74

1. Introduction

Self-financing should be the key word when it comes to supporting expenditures of local governments which are autonomous (both administratively and financially). However, the whole modern world is confronted to the existence of vertical and horizontal fiscal imbalances, mainly caused by the heterogeneity of local fiscal potential which, combined with some equivalence of local public needs, determine local governments to permanently confront with the need to obtain more resources to cover all expenditures.

In these circumstances, central governments apply different solutions to restore equilibrium (operating subsidies, grants, subsidies, transfers, grants and quotas from shared taxes etc.), under

the generic title of intergovernmental transfers system (inter-administrative in the case of unitary states). However, local socio-economic development, especially in countries that pass or have recently gone through transition, demands for major investments, especially in infrastructure, the regions "left behind" being, from this point of view, the most obliged.

In accordance with the above mentioned situation, the need of local governments to finance higher expenses compared to the resources normally raised at their disposal, determines their options for the use of extraordinary resources, usually raised via local (public) loans. It should be noted, however, that recourse to loans is not a good solution in any circumstances (there are, for example, legal borrowing limits) and that the employment of such a solution basically represents a deferred payment through additional taxes, as the latter will represent the basis for raising public financial resources allocated for the repayment of loans and of additional costs generated by loans (interests, fees etc.).

2. The subject of the research, methodology and state of knowledge

The use of local public loans raises the issue of the indebtedness capacity of involved subjects, under two major aspects: what are the legal limits of indebtedness and how are they set, respectively, what is the effective capacity of local authorities to borrow. An analysis based only on the legal regulation of the limits would be unrealistic if it is not accompanied by a proper interpretation (analysis) of the effective indebtedness capacity of these communities.

Under these circumstances, the paper seeks to position the main theoretical and empirical evidences in the field based on a quantitative analysis (data from the consolidated general budget of local governments, 2007-2009), in permanent conjunction with monitoring and analysis of the involved qualitative aspects. For ensuring the relevance of the research results, the analysis undertaken refers to the legal framework in function throughout the considered period of time, without involving the legislative changes operated in mid-2010.

The issue proposed for debate did not represent the subject of a major and distinctive research in Romanian literature, partially being captured in the broader context of treating local public finances issues. Thus, I. Văcărel (Văcărel et al. 2006: 591-602) notes that the possibility of local indebtedness incurrence is closely related to the manifestation of local autonomy. Gh. Voinea (Voinea 2008: 103) deals with the content of legal indebtedness limits, concluding that they must be cautiously set.

3. Qualitative dimensions of the legal indebtedness capacity of Romanian local governments

The Romanian legal framework on local governments borrowing mainly consists in Law no. 273/2006 on local public finances, which enables local governments to approve the contracting or guaranteeing of loans for local public investments and local government debt refinancing, subject to certain conditions. Thus, according to the legal provisions in force between 2007 and 2009, the total amount of annual debt payments representing the principal on contracted and/or guaranteed loans, interests and other related charges, including those on the loan which was intended to be contracted and/or guaranteed (but excluding, in line with the objective of improving the absorption of European funds, the loans contracted or guaranteed by local governments to ensure pre-financing or co-financing for projects benefiting from European financial assistance), should not exceed 30% of local budgets' own revenues.

Considering this legal requirement, we can measure the legal capacity (potential) of indebtedness as the difference between the limit of 30% for the share of local public debt service in local governments' own revenues and the actual level of this indicator in the reference year.

Since 2010, in line with Government Emergency Ordinance no. 63/2010, the condition required to allow for new local government borrowing has been reconsidered by referring to the last three

years average indicators and excluding local revenues from the sale of goods. The compliance with the limit is, thus, assessed according to the following formula:

$$C_c + C_n \leq 30\% * \frac{\sum_{i=1}^3 [V_p(t-i) - V_c(t-i)]}{3} \quad (1)$$

where: C_c/C_n - principal + interests + other fees for old/new loans

V_p – local governments' own incomes

V_c - revenues from the sale of goods

t - year of reference

We appreciate that the most sensitive issue regarding the dimensions of the legal indebtedness capacity is represented by their validation into practice, so that the local (financial) autonomy expresses, as it would be natural, not just as management of legal tasks as in the devolution system, but as a support and incentive for originality, innovation, creativity and development in line with local preferences, as direct expression of a local "entrepreneurial" administration, indispensable in our times. As it results from our analysis, for Romania, under the impact of specific factors of different nature, taking advantage of the legal indebtedness capacity is far from bringing its benefits to local communities' development.

4. Quantitative dimensions of the legal indebtedness capacity of Romanian local governments – comparative perspectives

Globally considered, the indebtedness capacity of Romanian local governments reflects the general state of the economic and social environment, being directly connected with. Although repeated local public finance reforms sought to satisfy the permanent request of local communities representatives and also the recommendations of international community representatives to increase the level of local governments' own revenues (by reference to the expenditures assigned to them), the situation has not registered substantial progress. In fact, allowing for additional revenue sources for local governments as well as the transfer in various forms (mainly grants and quotas from shared taxes) of increasing amounts of resources in nominal size from the state budget to local budgets has permanently been overtaken by increasing local expenditures, as a result of transferring more and more responsibilities from central governments to local governments.

On such basis, combined with the lack of adequate predictability of local revenues and, recently, with deteriorating overall economic situation, most revenues have been directed towards current expenditures and not capital ones. In this context, the lower orientation towards investments was reflected in some conservation of the indebtedness capacity of local governments, which decreased over the period of analysis, but not so much as it would have been expected within a local environment where the need for infrastructure and capital repairs is obvious.

Considering the indebtedness capacity, determined as the difference between the legal limit of the local public debt service share in local governments' own revenue, of 30%, and its effective level, corresponding data for all Romanian local governments are summarized in table no.1.

Table1. Overall share of local public debt service in local governments' own revenues

Indicators/Year	2007	2008	2009
Own revenues of local governments (million lei)	17317,4	20587,7	21117,6
Local public debt service (million lei)	769,2	1290,6	1732,3
Local public debt service/Own revenues (%)	4,44	6,27	8,20

Source: author's own calculations, data from the Ministry of Public Finances

The data in table no. 1 show that, during the period of our analysis, overall local governments have exploited only 27,33% of their legal indebtedness capacity, which is fundamentally inconsistent with the permanently claimed need for additional financial resources and the

relatively low level of urban and rural development in Romania, especially when considering the infrastructure.

However, the average value of the indebtedness capacity must be subject to cautious interpretations, since it hides different realities from one region to another, from one type of area or administrative division to another. For the Romanian development regions, indebtedness capacity data are reflected in table no. 2.

Table2. Local public debt and the share of its service in local governments' own revenues, by development regions

Development region/Year	2007		2008		2009		Local public debt (millions lei)
	SDL/VP* (%)	Rank	SDL/VP (%)	Rank	SDL/VP (%)	Rank	
Nord-Vest	3,38	5	5,30	4	11,16	6	945,0
Nord-Est	14,34	8	15,56	8	11,82	7	1432,7
Sud-Vest Oltenia	1,70	1	3,23	1	4,62	1	415,9
Sud-Est	4,33	6	5,77	6	9,79	5	701,4
Sud-Muntenia	2,80	3	4,11	2	6,02	2	1004,7
Vest	7,22	7	9,71	7	8,36	4	758,4
Centru	2,58	2	5,73	5	11,47	7	1055,9
București Ilfov	3,01	4	4,73	3	6,13	3	4409,5

*SDL/VP - local public debt service/local governments' own revenues

Source: author's own calculations, data from the Ministry of Public Finances

Data in table no. 2 show that the North-East region, ranking last in terms of development, appreciated through GDP per inhabitant had, between 2007 and 2009, the lowest indebtedness capacity, the situation being consistent with the need to support investment projects in this region. On the other hand we can see that, although the North-East region ranks last in terms of the indebtedness capacity, from the perspective of the overall public debt it occupies the penultimate position. In opposition, the București Ilfov region ranks first in terms of overall local public debt, definitely detaching from the other regions, but ranks among the top three positions in terms of indebtedness capacity. Basically, the Bucuresti-Ilfov region simultaneously records a high local public debt and high indebtedness capacity. South-West Oltenia region also has a special position, occupying, in terms of overall public debt, the last position and ranking first in terms of the indebtedness capacity.

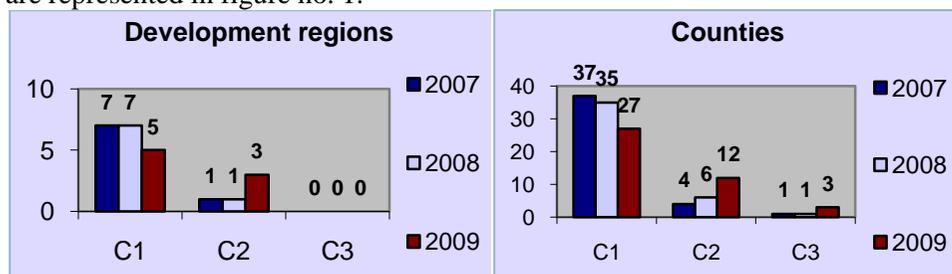
Considering the difference between urban and rural areas, we can note that rural communities have a greater indebtedness capacity, as a result of lower borrowing, as shown in table no. 3. Although the registered situation is normal, the spread of the indebtedness capacity is not as broad as the spread of overall local public debt between rural and urban communities.

Table 3. The share of local public debt service in local governments' own revenues by urban and rural areas and administrative divisions

Communities-Type of administrative division/Years		2007	2008	2009
Communities	Urban (%)	4,25	6,99	9,24
	Rural (%)	5,30	3,05	3,49
Administrative divisions	Communes (%)	5,30	3,05	3,49
	Cities, other towns and sectors of București(%)	4,51	7,96	10,21
	Counties, București (%)	3,68	4,98	7,27

Source: author's own calculations, data from the Ministry of Public Finances

Considering the administrative divisions, the situation is similar. The data in table no. 3 show that towns have the lowest indebtedness capacity, followed by counties and communes. For the particular case of Romania, this is also due to the lack of consistent practice of partnerships between different counties, which could provide a more consistent support for local borrowing. Globalizing the results of our analysis, we propose a grouping of Romanian communities on three categories: local communities with public debt service share in local governments' own revenues below 10% (C1) are regarded as having a high indebtedness capacity, those for which this indicator takes values between 10 to 20% (C2) have average capacity and those with more than 20% (C3) reduced indebtedness capacity. The results for development regions and counties are represented in figure no. 1.



Source: author's own calculations, data from the Ministry of Public Finances

Figure 1. Number of development regions/counties by indebtedness capacity

From the above grouping it may be noted that most counties had, over the period of our analysis, high indebtedness capacity, but their number is declining, especially in the last year of analysis (from 37 in 2007 to 27 in 2009). Presently, only three out of 42 counties have reduced indebtedness capacity, which represents approximately 7% of the total. Similarly, the analysis by development regions shows that none of them has reduced indebtedness capacity, as a result of the offsetting effects that occur at intra-regional level, and few have medium capacity (highly approaching to the lower limit of the interval, of 10%) although, in this case also, we find that their number is increasing (from 1 in 2007 and 2008 to 3 in 2009).

Compared with the findings of our analysis, there are, nevertheless, enough reasons, in the current socio-economic context deeply marked by the international crisis, for the disparities to become more acute, the negative effects being primarily noticeable for the small local communities with low fiscal potential.

5. Conclusions

The analysis conducted clearly highlights the fact that Romanian local governments have a high legal indebtedness capacity, though it would be expected that the specific development needs determine them to use borrowed resources to a greater extent. This situation can be explained by the amount of local debt, by the unstable economic and legal context, but also by their excessive caution and socio-economic circumstances. In this respect, the restrictions imposed on local

borrowing in the context of the current Romanian economic crisis (the 30% limit being determined with reference to local governments' own revenues, excluding capital ones) might prove counterproductive in the short term, although they have economic and financial rationality. We might confront with the unfavorable situation where local governments will no longer have wide access to borrowing, and central government will not, at its turn, be able to guarantee their loans, sometimes indispensable to finance new investment objectives. We also insist on the idea that the main role, in this context, goes to local financial decision makers, which should have a proactive approach towards identifying new sources of revenue or more efficiently exploiting those already existing, which should provide them with more consistent own resources.

Judging cautiously, it must be noticed that the analysis carried out on local governments indebtedness capacity only highlights their formal, conventional indebtedness potential which is, in most cases, fundamentally different from the effective indebtedness capacity. The latter is actually the result of a particularized correlation for different local governments between legal indebtedness capacity and the manifestation of several factors with specific action. Among them stand local administrative capacity, financial market conditions, political, economic or social internal and international circumstances etc. In this regard, it is relevant the case of the city of Botosani which failed, in 2010, to issue bonds on the financial market, the subscriptions being below the minimum required limit. We propose in this context, to accept the need for a clear distinction between the legal and effective indebtedness capacity, accompanied by a permanent focus of public decision making processes on the latter. Only this way the correspondence with the real situation, essential for the appropriate development of local governments, could be achieved.

In these circumstances, setting a single limit, valid for all local governments, as happens in the Romanian system, appears in many cases counterproductive in relation to the reasons and rationality of the indebtedness. An example of good practice that could be considered a general benchmark for a future regulatory framework, could be that of Portugal, which practices legal borrowing limits annually personalized for each local government, thus valuing their real potential. No doubt, such an approach raises some difficulties when we consider more than 3000 administrative units and not 300 as in the case of Portugal, but we think that there are adequate decision-making structures at the central authority for public finances level, that could design and implement a such a strategy, especially considering that the informational systems facilitate these processes.

From this perspective, we believe it to be interesting, useful and necessary to develop through future scientific studies an independent concept of effective indebtedness capacity, based on justified and measurable indicators which could capture the different practical situations in which local governments could find themselves at different moments in time, research direction that we intend to follow.

Notes

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SUBSTANTIATION OF THE PUBLIC DEBT SUSTAINABILITY USING KALMAN FILTER

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Global economic conditions have pushed many countries into the delicate situation of contracting foreign loans, leading overnight at alarming volumes of public debt. The need for control and relevant analysis for the sustainability of a country's public debt has led us to use the Kalman filter in predicting future values of the key indicators of public debt. The development of a mathematical model of analysis for public services and the budget deficit was necessary to objectively assess the level of the public debt sustainability. Knowing future values of the public debt or the future evolutions of the revenues for the operational budget, offers the possibility of a better handling of the operational expenditures and finally a better balance for the public budget deficit. Using the mathematical mechanism of Kalman filters implemented in Matlab programming language, we generated the estimated future values of the proposed model proposed and key indicators, the results confirming the fears of a low public debt sustainability for Romania. We predicted the future values for the debt service, the public external debt and the operational public revenues, expenditures and deficit, and compared them, to obtain an image of the future evolution and position of the sustainability of the public debt. The work in this paper is an innovative one for the public science sector, and the results obtained are promising for future researches. The values estimated by the Kalman filter are an orientation for the future public policies, and indicate a rather stable but negative evolution for the public debt service. The sustainability of the public debt depends on the decisions taken for the correction of the estimated values, in changing the negative evolution of the budgetary indicators into a positive one. Taking all this into consideration we will conclude that the mathematical mechanism of the Kalman filters offers valuable informations for Government and future research should be oriented to develop it's returned results.

Keywords: Kalman filter, debt, sustainability, deficit, prediction.

JEL Codification: H63, H68, C02, C53, C88

I. Introduction

The financial crisis, transformed almost overnight into the global economic crisis, gave serious headaches to the central governments concerned with the reduction of the public budget deficits that the economic crisis has left behind. Although some economists (Nouriel Roubini(1)) have provided since before a housing price drop, a brutal shock of oil prices, a dramatic drop in the consumer's confidence, and inevitably a crisis, they were not taken into account. What was almost incomprehensible about the financial crisis proved to be a shocking reality shortly. A tough warning from the economists has become reality before long.

Many of those who saved, once the crisis began saw their dreams to gain access to education or to benefit from pension insurance shattered. With the financial crisis the global economy fell,

financial economics and central governments were faced with huge budget deficits that were threatening the national security of states.

The consequence of global economic crisis on the public budget was immediate. Business activities have suffered contractions and with this the budget revenues began to decrease dramatically. Consumers have abandoned durable goods, and reduced their consumption of utilities and remained at emergency levels of consumption goods for food and clothing. The times were almost apocalyptic for national economies, especially since governments have had to take a series of measures to delay public spending.

What did the central government to these financial hurricanes that have had to face?

Firstly., consider the case of Romania. Central Government faced a slump in income from the budget sought to adopt a strategy of rationalization of public expenditure in two ways. The first way was to reduce by 25 percent the salaries in the public sector. With all the strength that unions have expressed the measure was implemented and the effects are felt today in the public sector. Only 15% from the reduction of public sector wages that has been applied with the start of the crisis, were recovered. A second way, similar to the first, was also in rationalizing expenditure, so that the central government tried to approve the reduction with 15 percent of the pensions. But Romania's Constitutional Court rejected the government's decision and considered it as unconstitutional. So this measure has been replaced with a last resort one, the increase of VAT with 5 percent. It remains to be seen whether this measure has proved to be a rational from the perspective of increasing public government revenues or the measure will impact on the long term, the individual consumption of the population. Whatever the hedging strategies for covering the huge budget deficits that were triggered by the global economic crisis, government should identify the measures necessary to prevent insolvency for its own employees or even worse, to its financial creditors.

Moreover, as the mentioned measures were not sufficient, the government decided to contract a loan from the International Monetary Fund worth 20 billion euros, known at that time as Romania's belt. The declared purpose of the loan was to cover the budget deficit and to strengthen Romania's foreign reserve.

The reality is that the national economy was in need of strengthening its foreign exchange reserves to mitigate pressures on the exchange rate. So to avoid another financial risk that could embarrass macroeconomic conditions triggered by global economic crisis, namely the risk of uncontrolled growth of foreign exchange. It would inevitably affect the consumers whom could not exert influence on the growth of consumer's goods prices.

Threats of the huge budget deficits, the rising of the public debt (almost exponentially) and the uncontrolled increase in the exchange rate are just some of the unwanted consequences of the global economic crisis.

How have other states responded to these threats? Overall the recipe was pretty much the same. Streamlining personnel expenditures (reduction with 2-3 percent for Germany, Italy and France) followed by a sustaining of the capital expenditures are the steps that states followed not to be affected from the huge budget deficits. Moreover, the ultimate saving came from the International Monetary Fund, which conditioned the public loans to cover budget deficits, with the the implementation of fiscal policy measures that have often proved unpopular. It is also interesting the case of Hungary, which identified the public service monopolies and financial institutions (banks) as a source of additional revenue to the public budget. In this way, additional profits were taxed from the banks and from the state companies operating in monopoly markets, particularly the gas market and electricity market.

It is obvious that all central governments saw public borrowing as the easiest path to follow for avoiding the risk of default, or to avoid cash shortages which threatened more than ever the public institutions.

The explanation is simple: You can not stimulate economic growth in order to collect additional revenue to the public budget by supporting short-term measures. This requires a long-term fiscal and budgetary strategy, including support for public investment, leading ultimately to economic growth necessary to supplement revenue to the public budget.

But public debt and debt service raises serious problems resulting from its sustainability in the budget. A simple rule shows that debt sustainability should be supported from the outturn of the operational budget. This means that the current revenues of the budget, after covering the operational expenditures are to cover the public debt service. But the current public budget revenues depend on two variables namely the impact of fiscal policies that support the central government in general and economic growth recorded by the national economies.

Sound fiscal policies of automatic stabilizers include those that can stimulate economic growth so as to get that extra needed public income for the debt sustainability. Therefore the paper proposes to use an innovative tool for the science of public finance, the Kalman filters(2). They will support the public finance manager (authorizing officer) to acknowledge what will be the future trend for the recorded current income in future periods of time, because on this basis he can predict those situations with the risk of default that may threaten the public debt service. Furthermore, in order to exercise a prudent control over the risk of default(3), the financial manager can anticipate situations that will appeal to refinance public debt, caused by the effect of volatile evolution on the current revenue received from the budget.

II. State of knowledge for the use of Kalman filters in economics

R.E. Kalman published his famous work, in the early '60s, which describes a recursive solution to the discrete data linear filtering problem(4). Since then, largely due to advances in digital computing, Kalman filter has been the subject to extensive research and applications, especially in autonomous or assisted navigation. Among the first approaches to the filter idea, as an introduction to the general idea of Kalman filter, can be found in Chapter 1 of Peter Maybeck's - Stochastic Models, Estimation and Control(5), while a more complete introductory discussion can be found in Harold Sorenson's books(6). More extensive references are included in the work of Gelb(7), Grewal, Lewis Jacobs and Evensen(8).

Prior to presenting the state of knowledge, for the Kalman filters, it is necessary to analyze the work of Norbert Wiener(9). Wiener described an optimal response for a finite impulse (FIR) filter, meaning the average quadratic error. We will not discuss his solution here, even though there are many parts in common with Kalman filter. Just remember that his solution uses both auto correlation and cross correlation of the signal received with the original data to obtain a response in a filter impulse.

Kalman has also submitted a option for quadratic errors of the filter. However Kalman's version has some advantages over Wiener's study: avoids the need to determine the filter impulse response. Kalman described his procedure of filtration using state space techniques, which unlike Wiener's method, allows a filter to work as an adjustant, as a filter or as a predictor. The latter depending on the applicability of the filter, Kalman filter that is able to be used to predict future data proved to be a very useful feature. This has led to the Kalman filter to a wide range of tracking and navigation usage. Defining the filter in terms of state space methods also simplifies the implementation of the filter in discrete values, another reason for its widespread use.

The concept of debt sustainability has been discussed for at least two decades. Two general approaches have been followed, first considers that the interest rate at which a government can not borrow more than the rate of economic growth, so that the ratio of debt to GDP does not increase, and an unsustainable debt does not appear. Another approach considers that if there is a constraint on the present loan, which could limit the amounts borrowed, then it would be the main criterion for achieving sustainability. Gupta (1992)(10) in an exponential work, consider

these two approaches to Asian countries. In both approaches, it underlines and show the importance of two key issues: the selection of an appropriate interest rate and use taxes. A useful discussion on these aspects and positions of different authors is presented in his book (Gupta, 1992).

III. The arithmetic of the public debt and of the budget deficit

Public debt sustainability should be a major concern of central governments to avoid default risk and a deterioration of the country's credit rating may lead to unjustified price rises in the cost of procuring the necessary financial resources to support any state deficits budget.(11)

Any theory of public debt should be confined to a seemingly simple question but with major implications for the public budget: How to ensure sustainability of public debt?

To answer this question it is necessary to resort to science expertise in public finance. This implies that government revenue should be divided into two distinct categories, namely current income, respectively capital income. In turn, public spending must also be structured into two categories, namely current expenditure, respectively capital expenditure. It thus forming two major categories of budgets for public debt sustainability analysis, namely the operational budget, respectively capital budget.

The operating budget is supposed to sustain the current activity of the state to finance the operating costs of the public institutions whose financing comes from the public budget, while the capital budget expenditure may support the investments and public expenditures on interest and on loans. The two budgets, apparently unconnected, communicate via the operational budget balance.

In the current income category, are included according to the speciality theory, tax and non-tax revenues consisting primarily of taxes and/or revenues from concessions and rentals, while operating expenses category includes personnel costs and material expenses and services are necessary for the public institutions financed from public funds.

Denoting the category of the state's current revenue with (V_C) and current project expenditures with (Ch_C), results that the first condition of public debt is the result of budget implementation for the operational budget to record levels to be higher or at least equal to debt service (S_{DP}), according to the relationship:

$$V_C - Ch_C = S_{DP} \quad (1)$$

Taking into account the relationship (1) and the analytic form of the income and expenses above the current relationship can be rewritten as follows:

$$V_f + V_{nef} - (Ch_{pers} + Ch_{mat} + A_{chmat}) = S_{DP} \quad (2)$$

In the literature the difference between current revenues and current expenditures is known as gross operating results which may take the form of surplus / deficit. If from the gross operating result is deducted the debt service we achieve the net operating result .

Through the arithmetic describing the public debt sustainability can be easily deduced at least two particular cases obtained by comparing the specific sustainability of public debt to the gross operating result, namely:

Situation 1 $\frac{S_{DP}}{R_{bop}} \geq 1$ corresponding to a situation where debt is sustainable from the gross

operating result which implies that there isn't a risk of entry of default on debt service. However the situation is a bit risky if the value of the indicator is close to one, which can trigger a long-term warning for the central government, on the ability to repay the debt service.

Situation 2 $\frac{S_{DP}}{R_{bop}} < 1$ is corresponding to a situation in which the debt service is not sustainable

from the gross operating result which means that central governments should support the refinancing of public debt service, through borrowing money from the public, which often can be quite expensive because of the high cost of the financing sources, necessary to cover the debt service.

Whatever values the indicator may take is important to note that the literature is purely innovative. Although the service is calculated as the ratio between the debt service level (S_{DP}) and gross operating result (R_{bop}) known as the indicator of debt sustainability (I_{SDP}), is the "supplier" of information about public debt service related to financial capacity that the state has to support for the debt service on which committed.

It is interesting to consider in this context, central government policies that can promote to ensure the sustainability of public debt service. There are two categories in my view that government policies can promote.

The first type of fiscal policy-oriented to public debt sustainability refers to the policy of increasing the income fiscal tax base. That is why one of the indicators examined in this context is the ratio of debt service and gross domestic product (GDP) to identify the possible growth potential at national level but also additional public budget revenues. It should be noted that there is no alternative to increase tax rate for tax revenue but this kind of fiscal policy is rather difficult to implement because of the opposition that usually the taxpayers manifest.

The second type of fiscal policy also focused on the public debt sustainability refers to rationalizing public spending. This policy may be a rational only if applied on the operating costs of public institutions. Otherwise, the damage brought to capital expenditures may inhibit the incentive effect of the public debt needed for economic growth especially in times of economic crisis.

Also important is the correlation between the budget deficits and public debt, because any explanation that we try to give for public debt in terms of substantiating its necessity, it is based on the deficit recorded during the financial year.

Between two consecutive periods of time, the deficit is determined by the level of government spending (Ch_G), the level of public revenues collected on the budget (V_{BUG}) and the interest expense due to debt service set according to interest rate (i) and public debt (D_p) as a relationship form ($i \times D_t$).

Arithmetic equation describing the budget deficit will be given by:

$$D_t - D_{t-1} = Ch_G - V_{BUG} + i \times D_t \quad (3)$$

Analysis of this equation of evolution of the budget deficit without going into a detailed analysis that otherwise has been made in the literature, shows that every positive (ΔD_t) has to be covered by debt service, while negative values of this indicator can lead to identify the implications of budgetary surpluses already known to specialists in the field.

Regardless of the correlation that must exist between the budgetary deficit and public debt service is worth noting that for a manager of public financing resources, is important the knowledge of future evolutions, with a certain degree of certitude, for the operating income and the current expenditures. This is because it offers the possibility to anticipate future risks related to failure of payment of central government and can be taken to avoid such risk situations that may endanger the national security of states.

The response for all this information for the financial manager will be given by using an innovative tool in the science of public finances, namely Kalman filters.

IV. Kalman Filter mechanism

Kalman filter addresses the general problem of trying to estimate the $X \in R^n$ state for a discrete time process, described by the following linear stochastic equation:

$$x_{k+1} = F \times x_k + w_k; \quad (3)$$

where x_k a state vector of the process at the moment k , F is the transition matrix from the state k to the state $k+1$, and is supposed to be stationary for the whole period, and w_k is the white noise associated to the process the known covariance, Q .

The observation upon this variable can be modeled in the following form:

$$z_k = H \times x_k + v_k \quad (4)$$

where z_k is the measurement of x at the moment k ; H the connection between the state vector and the measurement vector, and is supposed to be stationary during the whole period, while v_k is considered to be a measurement error, a white noise, (12) with the known covariance, R .

The difference between the estimated state \hat{x}_k and x_k is also known as error

$$f(e_k) = f(x_k - \hat{x}_k) \quad (5).$$

Considering the error function that is strictly positive and monotonically increasing, we can write $f(e_k) = (x_k - \hat{x}_k)^2$. Since it is necessary to consider the filter's ability to forecast data series over long periods of time, we rewrite the loss function $E(f(e_k))$, from where it results the least square function: $e_t = E(e_k^2)$.

Consider that the two covariances for the errors are: $Q=E[w_k, w_k^T]$ and $R=E[v_k, v_k^T]$.

The least square function is $P_k=E[e_k, e_k^T]$, where P_k is the covariance matrix at the k moment. This equation can be extended to the following form:

$$P_k=E[(x_k - \hat{x}_k)(x_k - \hat{x}_k)^T]. \quad (6)$$

In demonstrating the Kalman filter equation, start by putting as objective finding an equation that uses an a posteriori state estimate \hat{x}_k with an a priori estimation \hat{x}_k' , and the difference between the measured value z_k and a prediction of the measure, $H\hat{x}_k'$,

$$\hat{x}_k = \hat{x}_k' + K_k(z_k - H\hat{x}_k'), \quad (7)$$

where K_k is considered the Kalman gain. This is a matrix that has the role to minimize the a posteriori covariance error.

$$\text{Note } i_k = z_k - H\hat{x}_k'. \quad (8)$$

By making replacements in the covariance matrix P_k , the derivation of the function by K_k , and the utilization of the matrix trace we obtain the following formula for K_k :

$$K_k = P_k' H^T (H P_k' H^T + R)^{-1}. \quad (9) \quad (13)$$

The covariance matrix for i_k prior denoted is $H P_k' H^T + R$.

The projection of the x_k variable, is $\hat{x}_{k+1}' = F \hat{x}_k$.

To complete the repetition is necessary to find an equation that projects the error covariance matrix in the next moment, $k + 1$. This is accomplished by writing an expression for the previous error: $e_{k+1}' = x_k - \hat{x}_k'$

$$\begin{aligned} &= (F x_k + w_k) - F \hat{x}_k' = \\ &= F e_k + w_k \quad (10) \end{aligned}$$

Using equation 4 and rewriting it for the moment of time k , we get:

$$P_k' = E[(F e_k + w_k)(F e_k + w_k)^T] \quad (11).$$

Given that between w_k and e_k , there is any correlation because w noise accumulates between moments k and $k + 1$, while the error is that by the time k . Therefore:

$$P_k' = E[e_{k+1}' e_{k+1}'^T] =$$

$$=E[F e_k (F e_k)^T] + E[w_k w_k^T] = F P_k F^T + Q \quad (12)$$

In essence the use of Kalman filter requires the use of two sets of equations:

For prediction

-The prediction of the future state

$$\hat{x}_{k+1} = F \times \hat{x}_k + w_k$$

-The prediction of the covariance error

$$P'_k = F P_k F^T + Q$$

For measurement or correction,

-The Kalman gain calculus

$$K_k = P'_k H^T (H P'_k H^T + R)^{-1}$$

-The update of the estimate on the extent of z_k

$$\hat{x}_k = \hat{x}'_k + K_k (z_k - H \hat{x}'_k)$$

-The update of the covariance error for the next step

$$P_k = (I - K_k H) P'_k. \quad (14)$$

V. Kalman filters use the debt sustainability analysis

In our analysis, we developed a Matlab (15) code for the program, code for mathematical equations proposed by Kalman filter, which, based on the analyzed data sets, generated estimates for periods of time so that we had real data sets comparison estimates, but also on future periods of time, for the purposes of prediction.

Following repeated simulations, needed to allocate the value of the transition matrix F, measurement matrix H, the two white noises, v and w, and their covariances, Q and R, the best simulations were obtained by assigning the following values :

$$F = \begin{bmatrix} 0 & 1 & 0 & dt & 0 & 0 \\ 0 & 0 & 1 & 0 & dt & 0 \\ 0 & 0 & 0 & 1 & 0 & dt \\ 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 \end{bmatrix}; \text{ Where } dt=1. \quad H = \begin{bmatrix} 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 \end{bmatrix}, \text{ and matrixes Q and R where identity}$$

matrixes of order 6 and 2. (16)

The key element in the ecuational system is the Kalman gain, which is the variable that stores the past evolution of the data series. This projected increase accuracy of the information as the number of variables taken into account in constructing the time series is more widespread.

In Fig. 1 is shown the evolution of Romania's foreign public debt service for a period of 74 months December 2004 - January 2011. Using the Kalman filter, we generated starting with the 40th month, predictions for the public debt service evolution, comparing the data obtained in parallel with the real values of the debt service recorded. One can see a aproximation for the projected Kalman filter values. The values are predicted for a single month, then renewed their series filter data used to generate the next prediction.

<p>● - The real recorded value for public debt</p> <p>● - The value predicted through the Kalman Filter</p>

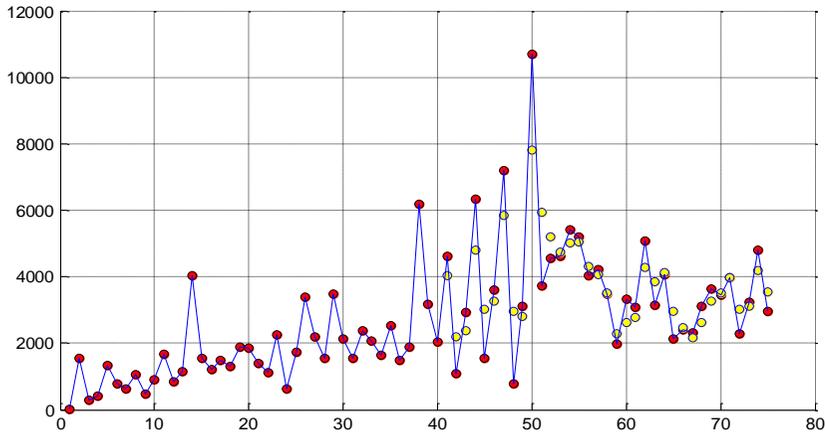


Fig 1. The evolution of the total external debt service and the prediction through the Kalman filters, comparison for the last 25 values of the data series; Monthly data series december 2004 – january 2011

Date source: bnro.ro, insse.ro

In order to achieve public debt sustainability at the national level is essential to have a number of indicators for the present and past values, so you can make accurate estimates of the future development. Thus, using Kalman filter, for the time series for Romania's foreign debt between January 2005 - January 2011, we generated future values for external debt over a period of 10 months. One can see that will continue the future upward development trend, but not with the same intensity.

In figure 3, one can observe the errors or deviations between the expected values generated and the actual values. You can also see the main feature of the use of Kalman filter, namely, the generation of more precise data on the growth of the data series used. Thus, the Kalman filter is not a simple prediction mechanism, it is a mathematical tool, generating an active process of updating the information in order to generate more reliable information.

However, in our research to assess the current and future sustainability of external debt, to have a clearer picture, we need to consider as we mentioned in the paper, the financial capacity of the budget to cover the public debt service.

Figures 4 and 5 show the evolution for the relevant indicators with a view to public debt sustainability analysis. A future perspective on the level of the revenue for the state budget, may provide an important advantage in view of future risk reduction, given by an unsustainable level of debt. Based on the Kalman filter used in fig. 4 can see a negative forecast for the developments in the next six months for the operational costs, while income level is only slight fluctuations over the prospect of the final level of expenditure growth.

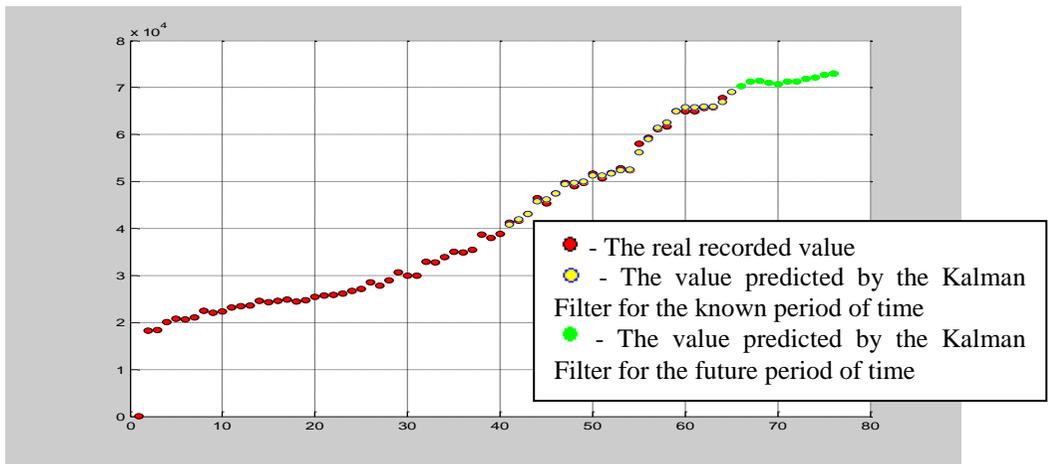


Fig 2. Evolutia datoriei externe, si previziunea prin filtrele Kalman Serii de date lunare ianuarie 2005 – ianuarie 2011 (mil. E)
 Sursa date: bnro.ro, insse.ro

As mentioned above, a level of debt service to be covered by a lower level of the primary deficit, or preferably, to a surplus. In Figure 5 we can see an upward trend in the gap between deficit and debt service. Beyond the 25th month, is found as the difference between the two indicators, create the base of a costly debt service. Expected future developments based on Kalman filters, also reveal a negative trend, especially in the penultimate month, when this difference tends to reach one of the highest levels.

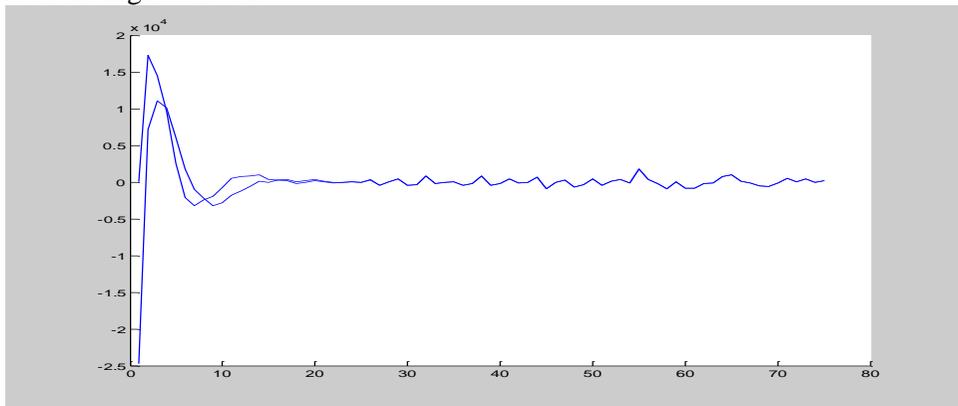


Fig 3. The evolution of the errors obtained by applying the Kalman filter on the public external debt and the real recorded values; MATLAB 7.9

VI. Conclusions, proposals and future research

Public debt sustainability is an issue of major concern for central and local governments in the European Union. Whatever indicators are analyzed to study the sustainability of public debt it remains as a fact that public funding of any government debt service can not be achieved only with a positive result of the implementation of the operational budget. The results of the operational budget should be sufficient to cover the debt service. Based on these assumptions we have developed a relevant indicator, that can provide factual information about public debt sustainability. This indicator was calculated as the ratio between debt service and operating budget outcome. Positive values indicate a debt sustainability while below par values indicate the contrary that may affect the public debt service, respectively the risk of default.

For any manager of financial resources is important to know information about the predictability of the operational income and operational expenditures. How predictable are they? Which are the future periods of time that may affect the sustainability of the public debt? It is a question which we attempted to answer through the application of the Kalman Filter.

It was found after the application of the Kalman Filter, that the operational income recorded a fairly stable evolution, while operational expenses for the period recorded a high enough fluctuation.

Debt service, during the projected period through the Kalman filters, also has a fairly stable level, continuing the late of trend. This means that debt service can be affected by the results of the operational budget deficits. That is why careful monitoring is necessary for the operational expenses of public institutions to reduce the default risk for the public debt service payment.

The advantages of using the Kalman Filter to predict, from classical methods, is given by the recursive mechanism, effective and accurate directly proportional to the series features the processed data.

Our future research directions in this area will move towards efficient fine tuning of the transition matrix and white noise used in the mathematical model. The study will also cover deepen regarding the progress of non-stationary series, where the results of Kalman Filters are known in the literature as being superior to other forecasting methods.

VII. Notes

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ANEXES

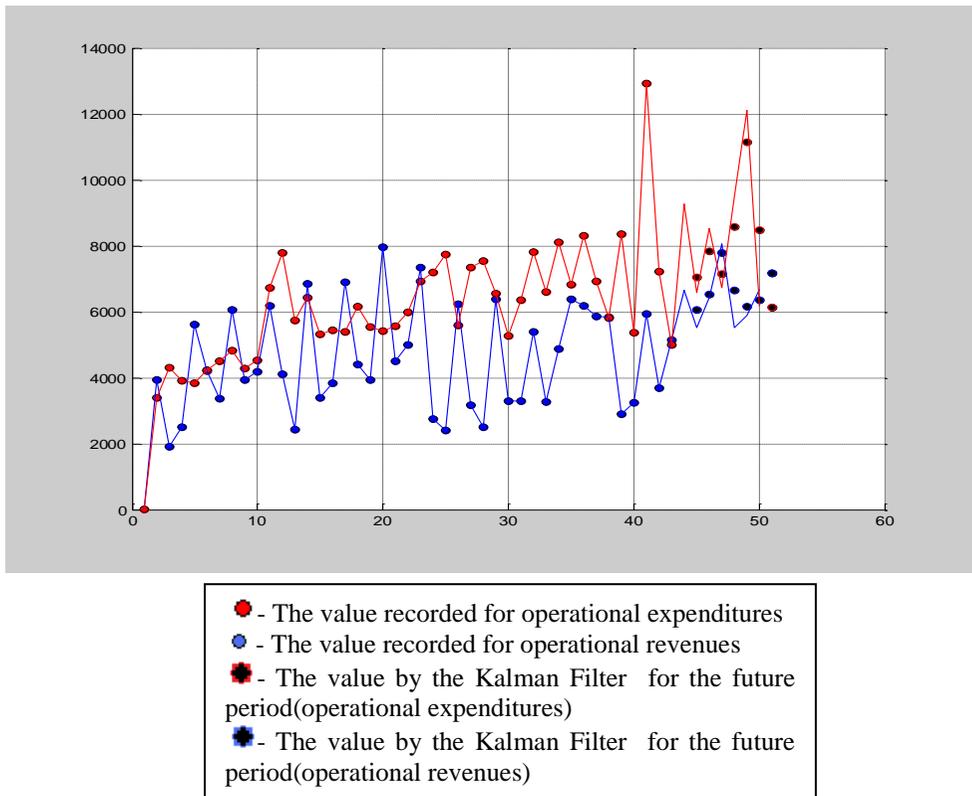


Fig 4. The evolution of the operational revenues and expenditures for the state budget (march2007-december 2010) and the prediction for 6 months (mil. RON)

Source of data: insse.ro, mfinante.ro, MATLAB 7.9

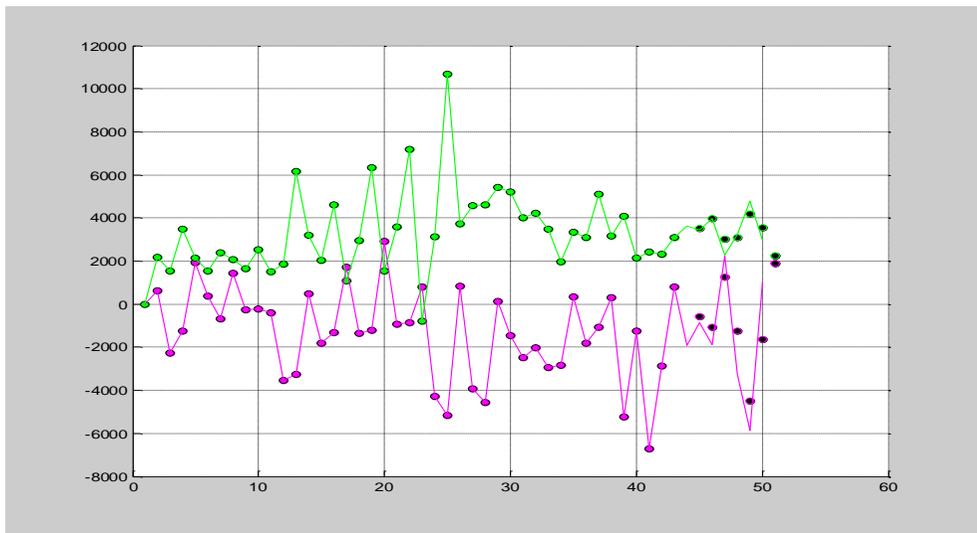
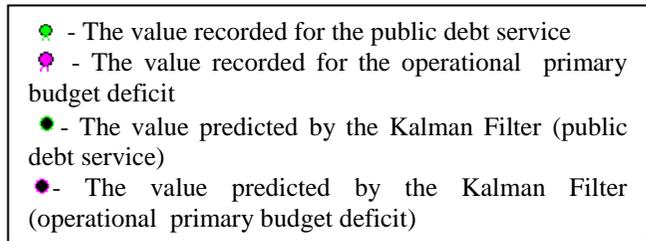


Fig 5. The evolution of the public debt service and the primary budget deficit (march2007-december2010) and the prediction for 6 months

Source: insse.ro, mfinante.ro, MATLAB 7.9



USING SPLINE FUNCTIONS FOR THE SUBSTANTIATION OF TAX POLICIES BY LOCAL AUTHORITIES

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The paper aims to approach innovative financial instruments for the management of public resources. In the category of these innovative tools have been included polynomial spline functions used for budgetary sizing in the substantiating of fiscal and budgetary policies. In order to use polynomial spline functions there have been made a number of steps consisted in the establishment of nodes, the calculation of specific coefficients corresponding to the spline functions, development and determination of errors of approximation. Also in this paper was done extrapolation of series of property tax data using polynomial spline functions of order I. For spline implementation were taken two series of data, one referring to property tax as a resultative variable and the second one referring to building tax, resulting a correlation indicator $R=0,95$. Moreover the calculation of spline functions are easy to solve and due to small errors of approximation have a great power of predictability, much better than using ordinary least squares method.

In order to realise the research there have been used as methods of research several steps, namely observation, series of data construction and processing the data with spline functions. The data construction is a daily series gathered from the budget account, referring to building tax and property tax. The added value of this paper is given by the possibility of avoiding deficits by using spline functions as innovative instruments in the public finance, the original contribution is made by the average of splines resulted from the series of data.

The research results lead to conclusion that the polynomial spline functions are recommended to form the elaboration of fiscal and budgetary policies, due to relatively small errors obtained in the extrapolation of economic processes and phenomena.

Future research directions are taking in consideration to study the polynomial spline functions of second-order, third-order, Hermite spline and cubic splines of class $C2$.

Keywords: fiscal policy, budget deficits, spline functions, budget justification, debt crisis

JEL codification: C29, H72

I.Introduction

After about two years from the financial crisis debut, local governments from everywhere are preoccupied to ensure the financial resources needed to finance budget deficits and to ensure quality public services provided for the interests of beneficiaries.

The financial crisis has left deep scars in local communities. Financial pandemic has spread rapidly throughout the economic system. Budget revenues have fallen dramatically, budget deficits have become chronic and in front of these realities the local authorities had to identify solutions to avoid the financial collapse .

Often local authorities have had to turn to central government to finance budget deficits or to support throughout the budget transfers some categories of public services. The dependence of central government proved to be mostly harmful. This is because local authorities could not avoid political influence in their own public policies. In this way there was created a financial dependency on central government, which had had an impact on the quality of public services provided. The explanation for this financial dependence is not justified only by the economic crisis. There is another reason that explains this phenomenon resulting from the manner in which it was understood the financial autonomy of local governments written in the European Charter on Local Autonomy in Strasbourg. The common denominator of financial autonomy is that local governments have the property tax as a revenue source for their own budgets. But this proved to be insufficient compared to the funding needs on public services that local governments have to ensure. The solution identified to introduce a new type of tax in the configuration of financial resources available to local governments has proved to be a useful solution yet insufficient. It is about shared taxes which are included in own revenues of local governments in Romania, does not fully cover financing needs of their local communities. Therefore the needs for financing, most often over the financing capacity of local governments are the result of transferring competences, duties and responsibilities regarding public services. It is about public services such as preuniversity education, health and social protection, local police, evidence of the population and lately the public health services.

In this way budget transfers were maintained as a last minute solution for decentralized financing of public services which are useful but only turns local authorities into simple financial resources cashiers who runs the operations of receipts and payments. There has been tried budgetary balance solution by means of balancing allowances contained sharing of income tax (currently 22%) and also for balancing amounts allocated by the central government to local governments, but the criteria allocating these amounts are subject to dispute between the Ministry of Finance and local governments interested in obtaining an opportunity to exploit the maximum amount in the allocation on these financial resources.

Therefore the central government in the process of budget elaboration divides financial resources into two major categories namely: own revenues and transfers from the budget. Also own revenues include income tax on property taxes, income tax shared revenues from concessions and assets of local governments which are public property. Most of the times own income does not exceed 50% of the total revenues available to local governments, which confirms the theory that local governments are financially dependent on central governments and has a poor financial capacity which is relatively low compared to the funding needs that local governments generally have.

Budgetary transfers even though they are significant in amount, they have most cases fixed destination so that local governments operates receipts and payments transactions which runs between the central government and local governments.

There is a natural question and in the same time legitimate: are there interested local governments to ensure a prudent and efficient management of own financial resources? And the answer, especially in times of financial crisis, can only be yes.

But managing their own financial resources can not be ensured without a budget process governed by modern tools and techniques that allow the decision-makers (local governments) to measure the level of these financial resources, to identify new alternative tax bases and then through the mechanisms of public funds to ensure financing of public services.(1)

The key element in the budget process is the budget formulation stage. Either it is known that the planned financial resources is equal to the financial resources consumed. The simple rule of budgetary balance. What did the science of public finances so far? has provided series of structured budgeting methods into two categories namely: traditional methods and modern

methods budgeting. A brief recap of their category indicates which in classical methods included direct method of increase / decrease and modern methods which include zero base approach or rationalize expenditures budgeting method.

These methods(2) had the disadvantage that are relatively unpredictable because are based throughout the series of data from the previous period of time and do not take into account the various correlations that may occur between different variables within in portfolio of any local budget revenues . Moreover, in the process of budget forecasting for time periods of three or five years, these methods have proved to be highly unnecessary as there had long-term low predictive power.(3)

The major disadvantages have been the motivation of developing this work, which was necessary to identify other ways to approach the predictions in the planning of budgetary resources to prove his worth. For this was an innovative area was identified in the science of public finances namely the use of spline functions.

II. What are spline functions and how they can be applied in the substantiating of fiscal and budgetary policies of local governments?

II.1. Brief history of spline functions. State of knowledge in the field of spline functions.

The notion "spline" comes from ancient times, from a mechanical device used by draftsmen in draw smooth curves. The term spline function in mathematics was first used by Schoenberg in 1946.(4)

In 1946, mathematicians began to study the shape of splines and derivatives of polynomial formula known as the term spline curve or the term spline function.(5)

This has led to widespread use such computer aided design functions, particularly in the areas vehicle designs. IJ Schoenberg had given the name of spline function after its resemblance to the mechanical used by draftsmen.

The word "spline" comes from term used by shipbuilders, referring to pieces of thin wood. In the past 40 years, functions have become very popular in computer graphics, computer animation and computer aided design field. It is difficult to find any industrial product, no spline substance . Also, they are widely used in studies of mathematics such as interpolation approximation. Spline gives another way to represent the class of functions. For decades, mathematicians had used for the polynomial calculus. In the early 20th century, with advances in approximation theory, spline functions had started to appear. The basic idea is simple. In essence, they consist of portions of polynomials with local support.

In the late 1950, two French mathematicians, Pierre Bézier from Renault and Casteljau Paul from Citroen, had independently developed spline-based computer aided design systems for cars.(6)

In last decades a very important place in the scientific field is taken by spline functions, which its crowd forms a linear space. They present the major advantage to be easy programable leading to final numerical solutions. Also it important the fact that polinomyal spline functions have the property to minimize a seminorma of spline interpolation function odd degree, the using Hilbert space techniques can be defined as a unique spline element solution of a variational problem. This allows to obtain important properties of all multitude linear spline functions such as spline functions of polynomial, trigonometric, exponential, L-spline functions, etc. Chebyshev type. One can thus study the convergence of spline interpolation functions to the function which interpolates in usual rules Chebyshev and L2, and the order of convergence.(7)

Spline functions are characterized by their shapes subintervals between two nodes (which can be various known functions) and certain conditions for connecting the nodes.

Spline functions in recent years had found wide application, the main purpose being the interpolation. For spline interpolation was not deducted an expression of the error of

approximation, a straightforward manner, as polynomial interpolation. It was retained only the statement that continuous function can be approximated as well all the interval $[x_1, x_N]$ when the number divisions increases, ie, spline interpolation is always convergent.. Because the derivative of order m , $s^{(m)}$, of a polinomial spline function is a step function (constant on intervals) while step function as well approximates continuous function splines on the interval when the number of divisions increases, we may give error assessment based on the maximum deviation between the derivatives $f^{(m)}(x)$ and $S^{(m)}(x)$ suppose that $f^{(m)}(x)$ exists and is continuos.(8)

Spline functions are used mostly in the industrial world. There are very few areas of production and engineering where these interesting functions are not used, and their use continues to grow at a rapid pace.

Robin Forrest describes "lofting", as a tehnique used in airplane industry during the World War II to build splines from thin wood for airplanes. Later the „lofting conic” was discovered, wich replaced so called splines in the early 1960 due to JC Ferguson`s work at Boeing.

At Boeing, these functions are used not only to represent geometrical models, for shape and curve modelling but also at the engineering analysis.(9)

Engineering analysis and simulation is very important especially for a big engineering company such as Boeing. The examples are various, from sophisticated simulations for fluid dynamic calculation to simple codes of linear analysis wich uses simple physics models. Some codes are used to calibrate the calculations, while others use B-spline, wich forms a base for any kind of space given by the spline function as finite elements. In the finite element case, engineering codes creates spline approximation to de ordinary diferential equations, equations with partial derivatives, integral equations and algebrical, beeing a popular approach done by Boor and Swarts in 1973.(10)

II.2.Spline functions algorithm

To clarify the spline functions algorithm we start from several features considered as work hypotheses to explain this rational mechanism with the possibility of applying in economic sciences, namely:

a) we consider a series of data with the values $(x_1, x_2, \dots, x_{n-1}, x_n)$ wich are in the same time a division $\Delta \cdot a = x_1 < x_2 < \dots < x_{n-1} < x_n = b$ of the interval $[a, b]$;

b) the space of spline function is considered as:

$$S_m^k(\Delta) = \left\{ s, s \in C^k[a, b], s|_{[x_i, x_{i+1}]} \in P_m, i = 1, 2, \dots, n-1 \right\} \text{ with } m \geq 0, k \in N \cup \{-1\}$$

where m represents the spline degree and k the smoothness class of spline function`s space .

If $k = m$ then function $s \in S_m^m(\Delta)$ are polynomials.

For $m = 1$ and $k = 0$ we obtain linear splines.

The division points of the interval $[a, b]$ are called nods, and in each nod we know the value of the function $f(x_i)$ form $y_i = f(x_i)$;

If we note $s(x_i)$ the spline function with wich approximate the function $f(x_i)$ on the interval $[a, b]$ then we have to identify the form of the function $s(x_i) = f(x_i)$ wich take values $(x_1, x_2, \dots, x_{n-1}, x_n)$.

In the interpolation approximation we suppose that (x_i, y_i) are known. If due to various reasons the nods are affected by errors then the interpolation criterion is inadequate.(11)

With other words spline function $s(x_i)$ approximate the function $f(x_i)$ on the $[x_i, x_{i-1}]$ interval with the following conditions:

1. the restrictions of spline functions on the subintervals $[x_i, x_{i-1}]$ are polynomial of m degree, $s|_{[x_i, x_{i-1}]} = p_{m,i}$

2. $s(x_i)$ is derivable (m-1) times on the interval $[a, b]$;

3. When connecting the nods, each nod is conditioned by:

$$p_{m,i}^{(k)}(xi + 1) = p_{m,i+1}^{(k)}(xi + 1), k = 0, 1, \dots, m - 1, (1)$$

wich means that on the x_{i+1} frontier between the two subintervals, the polynomial from left side of $p_{m,i}$ and its first m-1 derivatives must have the same values with the polynomial from the right side of, $p_{m,i+1}$. Outside the interval [a,b] the function $s(x_i)$ it can extend throughout polynomial of degree $\leq m$. (12)

The three cumulative conditions defines the spline function $s : [a, b] \rightarrow R$ wich is known in the scientific literature as polynomial spline function of m degree. (13)

In these conditions the polynomial spline functions can substantial contribute in the economic field in interpolating problems but also in approximation of functions wich describes the economic processes and phenomena with direct influence in economic variables predictibility and identifying the financial risk helping the managers to administrate the resources in the public sector. (14)

In the scientific literature there are three categories of polynomial spline functions known, 1st degree, 2nd degree and 3rd degree.

The **polynomial spline functions of first degree** have the following expression.

$$S(x) = S_i(x) = s_{i,0} + s_{i,1}(x - x_i), x \in [x_{i-1}, x_i] \quad (2)$$

with the coefficients $s_{i,k}$ wich are determined throughout the condition:

$$S(x_i) = y_i, i = \overline{0, n}; \quad (3) \text{ și } S_i(x_i) = S_{i+1}(x_{i+1}), i = \overline{1, n-2}; \quad (4)$$

The spline functions of first degree, also applied in this paper approximate with remarcable results, series of data with linear distribution and increasing evolution.

The coefficients of polynomial functions are determined from the two specific conditions of spline functions namely that value of the spline function in nods is equal with the value of the function $y_i = f(x_i)$ and from the continuity condition of spline function in each ond of the $[x_i, x_{i-1}]$ interval;

The **second degree polynomial spline** function use also in problems of interpolation and approximation have the expression:

$$S(x) = S_i(x) = s_{i,0} + s_{i,1}(x - x_i) + s_{i,2}(x - x_i)^2, x \in [x_{i-1}, x_i] \quad (5)$$

with the coefficients determined from the conditions:

$$S(x_i) = y_i, i = \overline{0, n};$$

$$S_i(x_i) = S_{i+1}(x_i), i = \overline{1, n-1}; \quad (6)$$

$$S_i'(x_i) = S_{i+1}'(x_i), i = \overline{1, n-1}; \quad (7); \quad S_0'(x_0) = 0; \quad (8) \quad (15)$$

The polynomial functions of second degree is introducing two suplimentary conditions in order to find the coefficients namely, the condition for the first derivatives in the continuity points of

spline functions and the local extremum condition for one of the extremities of second degree spline which usually is chosen in x_0 .

The **polynomial spline function of third order** has the expression:

$$S(x) = S(x_i) = s_{i,0} + s_{i,1}(x - x_i) + s_{i,2}(x - x_i)^2 + s_{i,3}(x - x_i)^3, x \in [x_i, x_{i+1}] \quad (9)$$

with the following conditions needed to determine the coefficients:

$$S(x_i) = y_i, i = \overline{0, n};$$

$$S_i(x_i) = S_{i+1}(x_i), i = \overline{1, n-1};$$

$$S_i'(x_i) = S_{i+1}'(x_i), i = \overline{1, n-1};$$

$$S_i''(x_i) = S_{i+1}''(x_i), i = \overline{1, n-1}; \quad (10)$$

$$S_i''(x_0) = S_{n-1}''(x_{n-1}) = 0; \text{ or } S_1'(x_0) = y_0', S_{n-1}'(x_{n-1}) = y_{n-1}'$$

Spline functions of third-order polynomial best fit the functions whose graphical representation is sine wave.

Additional conditions also refers to local conditions for two extreme ends of the second degree polynomial spline function.

The specialized literature has established and developed series of Spline functions along with the polynomial, as outlined above, with different applications especially in technical sciences. In the category of spline functions used for interpolation we know the cubic splines, the spline functions with Hermite interpolation on intervals, cubic splines of class C^2 etc. (16)

II.3. Spline functions mechanism in the public finance

The mechanism resumes to present the algorithm of application of polynomial spline functions in public finance. This mechanism was applied on series of data at a local budget level, in comparison with other techniques studied in the econometric field such as linear regression.

These steps are presented below for the polynomial spline function of first order.

Step I: Establishing the nodes $x_i; i = \overline{1, n}$; Usually the nodes are established randomly, equidistant, for every determined interval $[x_i; x_{i+1}]$ spline functions to achieve accurate approximation;

Step II: For each interval $[x_i; x_{i+1}]$ we establish the form of the spline function $S_i(x_i)$ using the expressions described above for the polynomial spline functions of first order;

Step III: Determination of coefficients $s_{i,k}$ from the spline function conditions, to take value in the delimited nodes in Step 1 and from the continuity conditions on the interval $[x_i; x_{i+1}]$;

Step IV: Establishing the form of the spline functions from regarding the coefficients determined for each interval and verifying the error of approximation using the relation:

$$e_x = f(x_i) - f(s_i) \quad (16)$$

Step V: Establishing the spline function used for prediction by calculating the average of the spline functions for each interval $[x_i; x_{i+1}]$ which they can estimate the values of function $f(x_i) = y_i$ when x_i is known for the future period.

Table no.1 – The algorithm of applying spline functions for series of data registered in economic process and phenomena analysis

The steps mentioned above are not limitative. They describe first-order polynomial spline functions adapted to the needs of economic researchers to estimate and study the predictability of economic phenomena and processes.

II.4. Using possibilities of polynomial spline functions of first-order in tax policies substantiation of local authorities

Nowadays tax and budgetary policies are very important for local governments which are aware of the importance of financial resources.

Budget deficits, public loans, public services, all of them are depending on tax policies. Unfortunately the tax policy is based almost entirely on the property tax which proved to be insufficient to satisfy the public needs of local communities. Although apparently were part of fiscal policies, shared taxes, are not in direct "coordination" of local authorities. This is because the shared taxes are collected by the central authorities after which the shares are allocated to local communities.

Based on these considerations we tried to realise a group of fiscal policies based on their role in stimulating the economic development. These attempts led to dividing the fiscal policies into the following category, namely:

Agressive fiscal policies: which are characterized by the fact that the tax rate and tax base are established at extreme values, imposed by law so they don't have a stimulative effect for the business environment neither to economic development.

Stimulative fiscal policies: are policies which are characterized by the fact that the tax rate and tax base plays a great role in the business environment stimulation. In this sense the local authorities provides tax incentives depending on the investment values and number of jobs created in order to stimulate the investments in the region.

Neutral fiscal policies: are those policies which have on their base the property tax but having values that doesn't change the taxpayer's behaviour.

Also budgetary policies includes the expenditure policy administration which are based on cutting the operational expenditures or based on supporting the long-term investments which leads to the local economic development.

Regardless of the theory of fiscal policy budget how spline functions are used in the substantiation of the fiscal policy? The answer is not simple. It can be formulated on two different directions, namely: by using the $r_i \times B_i$ method or predicting the budgetary revenues collected on the entire budget.

The first way, which is used at substantiation of property tax revenue it has to be known the base for a period of time, minimum one year in order to establish the future collected tax.

Polynomial spline functions of first-order will have the expression:

$$S(B_i) = s_{1,0} + s_{1,1}(B_i - B_{ii}), B_i \in [B_i, B_{i+1}]$$
 with the conditions imposed for the coefficients ($s_{i,k}$) of spline functions regarding the equality of the values in nodes and the continuity condition through nodes $S_i(B_{ii}) = S_{i+1}(B_{ii})$. (17)

This way of using spline functions determines the substantiation of fiscal policies depending on tax base. That is way local authorities have to identify a benchmark for the collected revenues from the property tax, and have to identify ways to increase the tax base at the a certain level proposed to realise.

The second direction, within fiscal policy of local authorities aims to predict the collected taxes from property when there is registered certain values of building tax. In this way using a polynomial spline function of first-order allows to establish certain property tax when building tax projection is known.

Regardless of the way spline functions are used, they permit approximating the evolution of tax property or other categories of revenues with a greater accuracy than other means known in the economic field (ie. econometry).

III. The research results obtained by applying functions in the substantiation of fiscal-budgetary policies

III.1. Research methodology

In order to realise the research there have been used as methods of research several steps, namely observation, series of data construction and processing the data with spline functions. The data construction is a daily series gathered from the budget execution, referring to building tax and property tax, and in the end the process of data was made according to the methodology described at 2.3.

III.2. Research results obtained through series of data processing using polynomial spline functions of first-order

To study the use of spline functions were considered two types sets of data from the budget execution for the year 2009 of Oradea Municipality (due to its easy acces at the database), respectively the **property tax** and **building tax indicators** registered in **February** 2009 and verified the appliance of spline functions in order to size the revenues for next month (**March**). The reason why past series were chosen is to verify the accuracy of using spline functions in extrapolations facing them with the real data registred in March 2009 for property tax.

From the given series of February were determined the polynomial spline functions of first-order wich is relevant for the evolution of tax property depending on building tax.

There were identified four nod, established at a range of seven days and were determined four polynomial spline functions of first-order for each week of February. Each spline is related to a week, taking equidistant range between the nod. Also were established the function wich describes the series through the **ordinary least squares (OLS)** method in order to compare the results of research using the extrapolation for OLS and for polynomial spline function of first-order.

In order to verify the accuracy of extrapolation using spline functions were considered three cases to reflect de difference between the function determined with OLS and polynomial spline functions of first-order.

Case I

Last spline function on February has been considered $S_4(x_i)$.

$$Y = 1.29872X + 123675$$

Case II

We consider the average of four spline functions resulted for each week

$$Y = 1,316065X + 10685$$

Case III

The function resulted from linear regression has been determined (Ordinary Least Square method)

$$Y = 1,28617X + 154722$$

In order to underline the efficiency of these 3 methods, throughout Gretl software, we have compared the extrapolated values for the property tax with the real values of property tax for March.

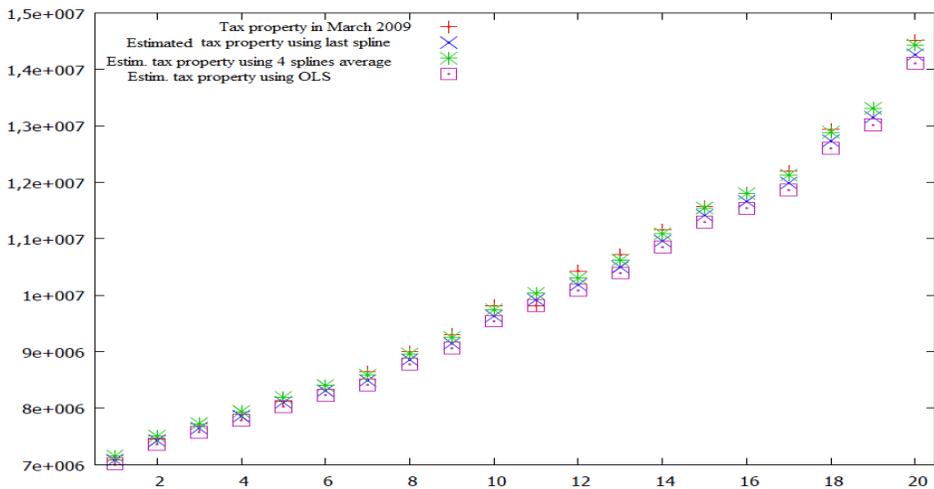


Fig.no.1 Comparison between the expected values fo March 2009 and real values,
 Source: Budgetary Account Oradea 2009

We can notice that approximating the revenues from property tax depending on building tax for March 2009 was realised with the greatest accuracy by the average of 4 spline functions resulted from the February 2009 series.

Also the function resulted using OLS method proved to be less efficient to describe the trend for the next period of time.

To underline the efficiency of these three methods were calculated the errors.

$$\varepsilon Y = Y - \hat{Y}, (11)$$

where: Y – real property tax, ε – error, \hat{Y} - estimated property tax;

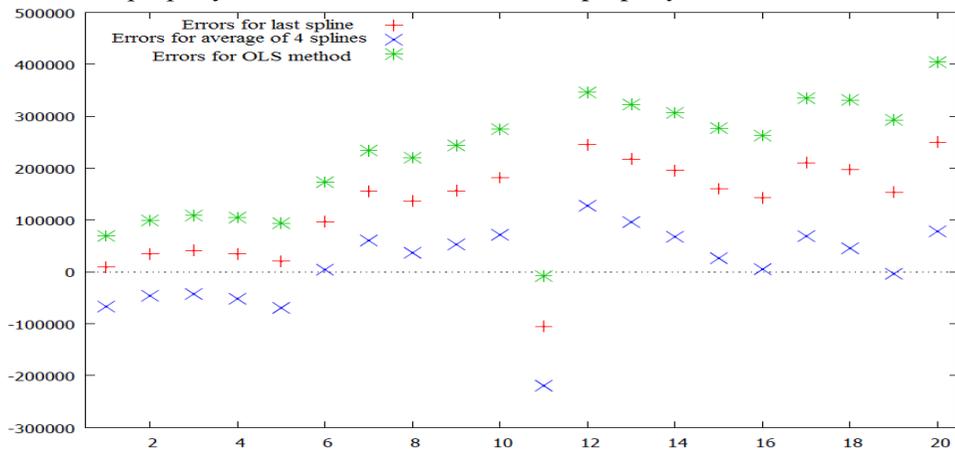


Fig.no.2 Resulted errors from extrapolation
 Source: Budgetary Account Oradea 2009

We can notice from Fig.2 that the smallest errors are given by the average of 4 splines method, the evolution of errors being close to zero. Also for the first week from March the better extrapolation is done by the last spline resulted from the last week of February, though the average of four splines proves to be the most accurate method.

The linear regression using OLS proves to be less efficient, the errors achieving high values. In order to underline the utility of spline functions we have built 2 series of data. By using MATLAB programming language we have generated the function which approximate the

distribution of variables fixing equidistant nodes and points of interpolation in the nodes for a better approximation.

We observe in Fig.no.3 the fact that spline functions is approximating the most efficient way in comparison with the regular polynomials. The polynomial of 6th order is decently approximating but in the end spline function is most accurate. The secret of splines is using polynomials of 3rd order on the intervals (2000-2500,2500-3000, ... , 4500-5000) known as cubic splines.

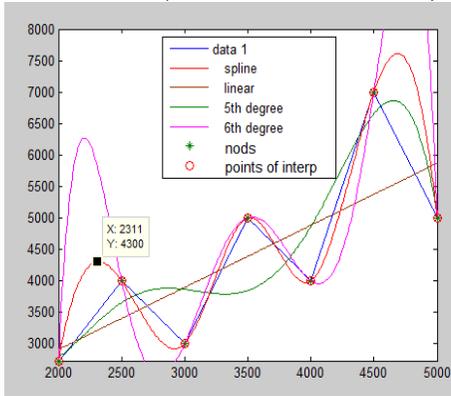


Fig.no.3 Comparison between spline functions and regular polynomials Source: author

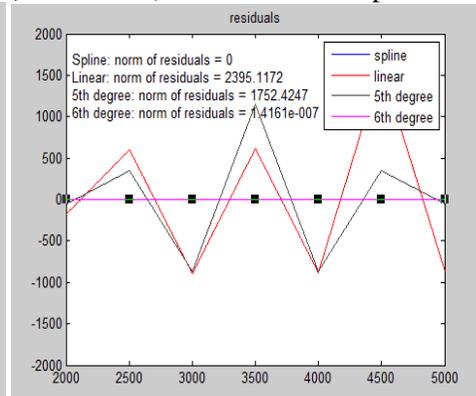


Fig.no.4 Error comparison between splines and regular polynomials Source: author

Also in the fig.4 we can observe the residuals being insignificant for the 6th order polynomial and even zero for spline functions.

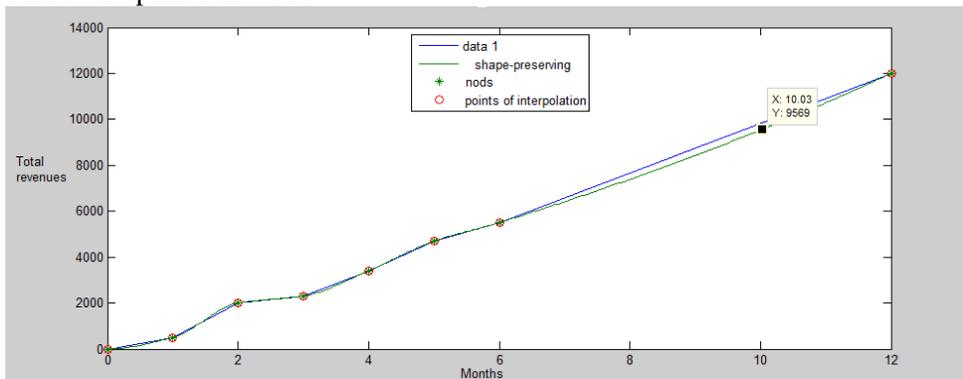


Fig.5 Monitoring the budget execution Source: author

As well, monitoring and controlling the budget execution can be made using polynomial spline functions by fixing a node at the end of a year. We know the values of revenues collected in the first 6 months and we can compare the revenues in month 10 with the collected revenues in order to see the difference between the estimated with the collected revenues. This method helps the public manager to size the expenditures for the next period in order to avoid budget deficits.

IV Conclusions

As a result of simulations made on real and theoretical data the opportunity of using polynomial spline functions as innovative instruments in sizing financial resources as well in other economic fields.

The accuracy of results obtained in the process of budget sizing, due to small errors of approximation, recommends spline functions as modern instruments in sizing the resources of budget.

Therefore, spline functions can be used for public **revenues predictability**, for finding the **trend of expenditures** in accordance to the **Case II** presented earlier also **tracking deviations recorded in the budgetary execution** of the planned budget. The two approaches of using spline functions increase the efficiency of public management. Using spline functions can result in avoiding incontrollable budget deficits and treasury deficits wich have an impact on taxpayers who will support the cost of public loans.

Using splines in the process of budget elaboration may lead the managers to be more aware of budget deficits and can take decisions according to the situation.

Regarding the tax policies of local authorities, by using splines can be established the tax policy wich has to be adopted when are establishing the revenues from property tax.

The polynomial spline functions has the advantage of easy calculation, free of specific complex tests used in linear regression.

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INCREASE IN THE ROLE OF THE FINANCIAL SYNTHESIS REPORTS FOR ACCESSION OF THE EUROPEAN STRUCTURAL FUNDS

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European integration is supported through important financial resources in order to sustain the investment effort for aligning the business infrastructure and increase in the business competitiveness in order to fulfill the European Union standards.

The financial management, a basic component of the general management, has as scope to realize complex financial analysis in order to substantiate the decisions for investments and financing which should ensure the maximization of results, ensuring also the elaboration of the project budget as an essential document in the identification of the needs for resources and for obtaining the non-reimbursable financial sources.

An essential role in the investment decision making, having as support European funding, is realized by the financial-accounting reporting documents such as balance sheet, profit and loss account, table of the treasury flows, which together with a realistic established actualization rate ensures the relevance and efficiency of the financial indicators: Net present Value(NPV), Internal Rate of Return(IRR), the investment recovery period, the benefit/cost ratio.

This study has as its goal to realize a critical analysis over the main simulation methods and techniques for forecasting annual return based on its growth rate, which should ensure the success of the implementation and operation of an investment realized through European structural funds respecting also the requirements for minimization of risks. In this research it is shown the importance of proper generation/modeling of the annual turnover in an investment project. Several methods were presented and case study was realized. Since the annual turnover constitutes the basis for the entire financial analysis it is very important that a realistic growth rate is used. Otherwise the provisions within the financial analysis of the investment (including CBA), the project implementation strategy and later the plan for the utilization of the newly realized investment might prove difficult to be fulfilled.

Key words: Structural funds, Financial Statements, Annual Turnover, Annual Growth rate

JEL Codes: G30, O16, G34, G38

Introduction

European integration is supported through important financial resources in order to sustain the investment effort for aligning the business infrastructure and increase in the business competitiveness in order to fulfill the European Union standards (European Commission, 2009).

The financial management, a basic component of the general management, has as scope to realize complex financial analysis in order to substantiate the decisions for investments and financing which should ensure the maximization of results, ensuring also the elaboration of the project budget as an essential document in the identification of the needs for resources and for obtaining the non-reimbursable financial sources.

An essential role in the investment decision making (European Commission, 2008) having as support European funding, is realized by the financial-accounting reporting documents such as balance sheet, profit and loss account, table of the treasury flows, which together with a realistic established actualization rate ensures the relevance and efficiency of the financial indicators(Droj

L., 2010): Net Present Value(NPV), Internal Rate of Return(IRR), the investment recovery period, the benefit/cost ratio.

This study has as its goal to realize a critical analysis over the modeling of the annual turnover an essential element in the financial analysis over an investment realized through European structural funds respecting also the requirements for minimization of risks.

The fundamental element of the financial modeling for an investment project is the accurate estimation of the annual turnover. The factors which should be taken into consideration for estimation of the volume of sales are:

- a) The tendency which is registered in the evolution of sales for the last period (the trend analysis). Extrapolation of the past tendency is a method which is often used, but not always in a realistic way, and in this way the modeling and prevision based on a global annual turnover, determined only by the past evolution can be erroneous, being necessary also a thorough analysis
- b) the discomposure of the annual turnover on product categories or services and analysis of the evolution of sales on each category.
- c) The analysis of the global level of the market of products and services, making estimations over the market share, which is depending also by the production capacity of the company, quality of products, the applied price strategy, competition, opportunity of external financing(credit), promotion campaigns.
- d) Dimensioning of the annual turnover at the level of the sustainable growth rate, will generate an insufficiency of funds, and the company will use external financing through loans, thus changing the degree of indebtedness, which will lead to higher costs related interest.

Generation of the Annual turnover - Literature Review and Research methodology

The existing theory (Dragotă, V., Ciobanu, A., L., Dragotă, M, 2003 and Higgins, Robert C., 1995) and financial practice is recommending the following methods for prevision of the annual turnover:

(A) Usage of the historic data

Assuming that there is a connection between the growth rates of turnover a company registered in the past and their future development, aggregation methods involve several alternatives:

(a) Using the average growth rate, projected growth rate of turnover is the average (simple or weighted arithmetic) growth rates recorded in the past. Simple arithmetic mean is:

$$\bar{g} = \frac{\sum_{t=1}^T \text{growth.rate}_t}{\text{no. periods}} = \frac{\sum_{t=1}^T (CA_t - CA_{t-1})/CA_{t-1}}{T}$$

Disadvantage of this method is that all periods analyzed are given the same importance. This drawback is eliminated by using the weighted average, which gives higher rates closer to the time periods forecast. Weighted arithmetic mean is:

$$\bar{g} = \frac{\sum_{t=1}^T \text{growth.rate}_t \times t}{\sum_{t=1}^T t} = \frac{\sum_{t=1}^T ((CA_t - CA_{t-1})/CA_{t-1}) \times t}{\sum_{t=1}^T t}$$

Depending on the average (simple or weighted arithmetic) growth in turnover, you can determine the projected turnover for next period:

$$CA_{prev(T+1)} = CA_T (1 + \bar{g})$$

Outlook depends on the length used as a source of information for extrapolating the average growth rate of turnover.

(b) Using the growth rate estimated by linear regression, assuming that the rate of growth recorded over time, based on a trend, so that the future growth rate is determined by the trend foreseen; regression is between turnover and the time using the method of least squares.

$$CA_t = \alpha + \beta \cdot t + \varepsilon_t,$$

where $t=1,2,\dots,T$;

α = amount of annual turnover when 0;

$\beta=\partial CA/\partial t$ represents the absolute change in annual turnover in a certain period of time;

ε =error (deviation) CAreal (CA_t) over the estimated Annual turnover(CA) estimated through by the β and free term α ($\alpha+\beta t$), respectively

$$\varepsilon_t = CA_t - (\alpha + \beta t)$$

Parameters α si β of the regression is determined based on data recorded from 1-T, so that errors be as small. By estimating the regression coefficients it can be determined the estimated turnover for the next period:

$$CA_{T+1} = \alpha + \beta(T + 1)$$

The deficiency of the linear model is given by the fact that the model, although it specifies an increase in the monetary units (ΔCA) is not appropriate for forecasting future growth.

$$\Delta CA / CA_{t-1}$$

Using historical data to estimate future growth in annual turnover is a useful but is not presents sufficient information. The empirical analysis demonstrates that it is unlikely that firms that have registered faster growth in certain periods are able to continue the same pace in future periods.

The relevance of the past data for forecasting future data depends on the establishment of the company and the business environment in which it acts; stability is influenced by the following factors:

-the volatility of growth rates is represented by change (dispersion) of growth rates compared to average growth rate calculated for a given sample size T (the records are from the period $t = 1$ at $t = T$)

$$\sigma_g^2 = \frac{\sum_{t=1}^T (g_t - \bar{g})^2}{T-1}$$

where : σ_g^2 = growth rate variation of CA

g_t = growth rate of the CA in the year t

\bar{g} = average growth rate registered in the period 1, T

-Firm size-measured in percentages- with increasing firm size becomes more difficult to maintain higher growth rates.

- Economic cycle - if the company's activity is influenced by economic change is essential when choosing data analysis - if there is a period of economic census, one can expect "increase" negative, so the forecast is irrelevant.

- Structural changes - the growth rates recorded are the result of the policy mix adopted by the company: investment policy and dividend policy. In case that the company changes one of these policies, the information by that time become irrelevant for predicting future developments.

(B) Using the sustainable growth rate

The rate of increase in turnover can be calculated:

$$g_t = \frac{CA_t - CA_{t-1}}{CA_{t-1}}$$

Increased turnover involves increasing proportion of the asset that corresponds to an increase equal to the liability. The concept of sustainable growth rate refers to the rate of increase in turnover to generate the maximum possible without financial imbalance, taking into account the following assumptions:

-The firm is unwilling to seek issuance of new equity shares; increasing profit is achieved by incorporating

$$\Delta CPR = \text{Reinvested Profit} = \text{Net Profit} - \text{Dividends}$$

- The company seeks to maintain the current capital structure (ratio of debt / equity = L = constant), increasing debt cannot be achieved only by increasing the proportion of equity

$$\frac{\text{Financial.Debits}}{\text{Equity}} = \frac{\text{Financial.Debits} + \text{New.loans}}{\text{Equity} + \text{Re invested Profit}}$$

-The firm seeks to maintain current dividend policy (dividend distribution rate = d = constant), the undistributed profits (left to the investment within the company) is (1-d), sustainable growth rate will be:

$$\begin{aligned} g_t^* &= \frac{\Delta ACTIV}{ACTIV_{t-1}} = \frac{\Delta Equity + \Delta Debits}{\Delta Equity_{t-1} + \Delta Debits_{t-1}} = \frac{\Delta Equity(1+L)}{Equity_{t-1}(1+L)} = \\ &= \frac{\Delta Equity}{Equity_{t-1}} = \frac{\text{Reinvested.Pr ofit}}{Equity_{t-1}} = (1-d) \frac{\text{Netprofit}}{Equity_{t-1}} = (1-d) R_{fin}^{13} \end{aligned}$$

There are three possible situations:

-the actual growth rate of annual turnover is higher than the sustainable growth rate - this can not be achieved only by relaxing one of the hypotheses: either resort to attract additional resources by issuing shares or debt increase or decrease rate of dividends, this strategy is not recommended to be used for a long term as it leads to excessive debt or shareholder discontent;

- actual growth rate is lower than the annual turnover rate with sustainable growth - the company does not use all available resources, so that opportunity costs are incurred;

- the actual growth rate of turnover is equal to the rate of sustainable growth – optimal option, so it can be use to forecast turnover rate with a sustainable growth:

$$g^* = \frac{CA_{prev} - CA_{actual}}{CA} \quad CA_{prev} = CA_{actual}(1 + g^*)$$

Investment decisions are an important part of the financial planning process, opportunities for capital expenditure, even they may seem financially attractive, can be rejected if would not lead to achievement of the proposed targets. Proper perspective on investment analysis is that strategic plans should create an umbrella to achieve operational and capital budgeting.

Growth and its management presents specific problems in financial planning, many executives saw growth as something to be maximized based on an increase in market share and profits. From a financial perspective, growth is not always a blessing, can substantially affect the company's resources and if are not taken adequate measures to control it, could lead to bankruptcy. It is regrettable that companies which pass the market test with their products, are failing because they lack sources of funding for management growth. Size of the growth rate can be analyzed by defining a sustained growth rate and by indicating a maximal rate of increasing company's sales without affecting the financial resources.

Management should analyze all the options when the target growth rate exceeds the rate of sustained development and increases falling below the level of support, ignoring the financial limit growth to preserve power.

Case study – Evaluation of the residual value and of its influences over the IRR in case of a Romanian production company

Financial analysis as component of the financing plan is intended to fundament the performance and sustainability of the proposed investment, the financial support, long-term sustainability, financial performance indicators in order to justify the financial assistance(Droj, 2010). Approval and implementation of investment with financial assistance from European structural funds needs the elaboration of different investment alternatives(European Commission, 2008) for a period of 5 years plus the period of implementation as follows:

- Inertial scenario – which forecasts with no investment option based on the present work
- Scenario with investment - which forecasts the activities and cash flow after realization of proposed investment: with and without financial assistance from structural funds.

The financial statements elaborated in order to fundament the investment process include(Guvernul României, 2010):

- funding needs for the business plan / project
- financial resources during the implementation period and after the structural funds assistance
- the balance sheet, profit and loss calculation of liquidity (cash flow) annually, estimated during the analysis.

Management generally is interested in the profit and loss forecast, profit being considered as a measure of performance while financial management is interested in estimating future financial needs. The projected revenues are interpreted in the context influence over the balance sheet in order to determine the optimal size of external financing.

Based on the financial contract presented by Guvernul României(2010) there are different situation for returning of grants as following:

- Reasons during investment implementation period:
 - false statements on the investment conditions
 - lack of proper justification and non-realistic expenditure
 - breach in the principles of sound financial management
 - non-contractual provisions for monitoring, information and publicity
- Reasons during investment operation period (5 years):
 - closure of business, relocation or maintenance of the investment for less than 3 years after the project completion
 - failure activities and not fulfillment of the objectives of the application form

In order to avoid the risk of return grants, investors must make a thorough analysis of objectives and results expected from the investment, according to the application form on:

- tangible or intangible, acquired by the project
- modernized production-area (agreed by the project)
- increase in turnover
- number of jobs created and maintained.

Based on projected turnover the required financial analyses should be forecasts. The most effective way of forecasting the balance sheet and profit and loss is correlated with the future turnover; some elements are dependent, varying in proportion to sales volume, while others are independent, due to other factors. Considering the methodology presented in the previous chapter, below we generated an annual turnover modeling for an existing Romanian company which tried to access European funding.

Table 1. Modelation of the Annual Turnover

Indicator	Year 0	Year I	Year II	Year III	Year IV	Year V
Annual turnover	7,421,224	7,725,075	8,057,275	8,404,875	8,852,475	9,307,775
Production Sales	7,419,073	7,722,924	8,055,124	8,402,724	8,850,324	9,305,624
Sale of Goods	2,151	2,151	2,151	2,151	2,151	2,151
Yearly forecast the annual turnover growth rate	-	4.09%	4.30%	4.31%	5.33%	5.14%

Source: own calculation

As observed in the first year after realization of the proposed investment will be obtained an increase with 4.09% of the annual turnover, which later will stabilize and will have annual growth increase rates between 4.30%-5.33%, in close correlation with the expected annual growth rate of the industry. Since realistic annual growth rate was proposed for the annual turnover in the years which are following the investment, the company was capable to maintain and even surpass the forecasted growth rate.

Conclusions

The previous realized analysis shows the importance of proper generation/modeling of the annual turnover in an investment project. Several methods were presented and case study was realized. Since the annual turnover constitutes the basis for the entire financial analysis it is very important that a realistic growth rate is used. Otherwise the provisions within the financial analysis of the investment (including CBA), the project implementation strategy and later the plan for the utilization of the newly realized investment might prove difficult to be fulfilled. Further studies should be carried out, especially in Romania, regarding the best method which should be adapted for Romanian case studies, taking into considerations all the particularities of the Romanian companies.

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THE IMPORTANCE OF THE JURIST AND ECONOMIST GHEORGHE N. LEON IN THE EVOLUTION OF FINANCIAL SCIENCE

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The economical-financial problems have always constituted a challenge for all the decisional factors at the state level and not only, thus the financial sciences – which also aim to regulate the relationships to create, assign and use the financial funds of the state and of the public institutions, destined to satisfy the social-economical needs of the society – recorded a great doctrinal interest.

Thus, a series of jurists and economists had understand the necessity and opportunity of knowledge in the domain of financial science, of the financial law, taking into consideration the fact that the difficulties which they have met at those times obliged them to take the responsibility to make every simple citizen and every person with political or administrative responsibility by the state understand the problems of public administration.

In approaching the given subject I have chosen to use some of the methods of scientific research, respectively: the historical method (financial science being presented succinct through the process of its evolution along the years), interpretation methods and a combination of quality and quantity approach, namely the method of analyzing archive documents and the studies of professor Gheorghe N. Leon.

In these contexts have asserted and developed himself in the university and political environment, Gheorghe N. Leon, having a rich activity of intellectual creation, approaching in his works the complex aspects of the science of financial law. Thus, starting with the rules and principles of this domain, Gheorghe N. Leon had realized a veritable incursion in the history of finances and in the theory of taxation, public and budgetary credit.

Analyzing a part of his scientific works, we can affirm that a personality with such a complex structure, like Gheorghe N. Leon is hard to define, but surely, through the prism of his works and through his long-lasting and rich scientific activity, his name can be mentioned among the personalities of the academic education in the domain of financial science.

At the same time we can affirm that in this actual period, when public finances represent an essential component of social-economical life of any nation, the scientific process of the most economists, the process of approaching notions and concepts specific to this domain was and remains fully justified.

Keywords – financial science, economical-financial politics, inter-war period, legislation, financial problematic

Code JEL: Economic History N00-General

The preoccupations of professor Gheorghe N. Leon in the expansive and extremely captivating domain of finances (of the financial study, in general) had concretized themselves in valuable works, appreciated by specialists, taking into consideration his great contribution in the development of the earlier mentioned research domain.

Spending most of his life with didactical activity, Gheorghe N. Leon have passed all its levels. After graduating at the Faculty of Law from Iasi (in 1911) he obtains his scientific doctor's title in economical sciences at the University from Jena (Germany), in 1914, the subject of his work being the study of direct taxation in Romania („*System der direkten Steuern in Rumänien*”). The study is dedicated to the critical exposition of the direct taxation system in Romania, discussions upon the optimal tax liability, being often subject of specialty researches. His work was remarkable because of its coherence and its responsible approach of research upon taxes, considered to be privileged instruments of public expenses „(1)”.

We can observe that Gheorghe N. Leon was a part of the category of young people with high hopes aiming towards the Central and West-European social and intellectual model. In that period finishing doctorate studies at a University from abroad have constituted a guarantee for social success, for a career and even a certification of intellectual competences. On the other hand, an important role in the formation of the young Gheorghe N. Leon had his father, professor Dr. Nicolae Leon, former rector of the University of Iași (in 1918 and between 1920-1921).

The first part of his university career of professor Gheorghe N. Leon have started at Cluj-Napoca. At the beginning of the university year 1919/1920 of the University Dacia Superioară, Gheorghe N. Leon, who will become a great personality of the Romanian economical and judicial education, begins his teaching activity at the Faculty of Law from Cluj as a professor, working by the financial and statistics department.

Even though the researches of Gheorghe N. Leon were often in the attention of lawyers and economists – those refined observers of the special phenomena of Romanian economics and finances – there are only a few syntheses upon them, and some aspects, especially the works published before beginning his didactical activity remain without much study upon them. Generally those critics and people who embrace the scientific opinions of professor Gheorghe N. Leon publish only some general reflections which cannot fully cover his various studies. Because of these facts his work must be reevaluated and confronted with some contemporaneous value criteria, there must be a detailed study upon the not well-known or „ignored” aspects of the intellectual creation of Gheorghe N. Leon.

Among the first studies published by Gheorghe N. Leon there is a study from 1914 entitled *Bosnia and Herzegovina under the Austrian-Hungarian reign* (Leon 1914), dedicated to the analysis of the evolution of the earlier mentioned territory in the period of the Austrian-Hungarian dominance – an investigation considered by the author to be necessary from an objective point of view to know „what are we allowed to do and what not in the conquering battle against a nation which still has aspirations for free life and autonomy of existence” (Leon 1914: 3). In the same time, it can be useful for any country also the observation of the administrative organizing models or that of the economical sector approached by the „neighbor” reign upon the occupied territory.

For the beginning there are relevant those three directions established by the author and the scientific argumentation, respectively: the population, the administrative and political organization and the economical development.

The author Gheorghe N. Leon discusses the economical life from the mentioned territory, the eternal subject of the economical relations being actual in any moment and by any community. Taking into account that the judicial regulations are a part of the ordinance concept of the economical relations (and taking into consideration the judicial formation of Gheorghe N. Leon), one of the approached problems was one related to the interferences between the economical action sphere and judicial action sphere. The author introduces at that moment the possibility of an association between these two notions, with some many intersections even in the specialty literature or the practice of today, especially because in the same time with the evolution of economical-social relations, this has become an actual and interesting subject. This way appear

the premises of analyzing this necessary association between the economical and judicial domain, association which always causes complex and different opinions. The author outlines with great talent the essence of this indissoluble relation between the two spheres, affirming, for example that no one will be able to fully understand the agrarian life of a nation „without knowing the judicial principle upon which the law of propriety is based” (Leon 1914: 16), that no one will be able to reach the aspects of the commercial life in a certain country “without knowing the principles based on which it was created” (Leon 1914: 16).

After examining the case in study chosen by the author, namely: Bosnia and Herzegovina in the period of the Austrian-Hungarian reign there are accentuated the structural changes suffered by this and the realized progress.

In conclusion, we can affirm that the work of Gheorghe N. Leon represents an actuality in any moment because the sources and the understanding of the economical and social-cultural growth of a country are important factors for the definition of the development strategy of any society. On the other hand the factors and models of economical growth have constituted a preoccupation of the researches of all times.

In 1915 Gheorghe N. Leon publishes the work *Mining politics in different states and its relation to the mining politics in Romania*, affirming that „mining was always an important factor in the economical and cultural history of the nations”.

For the profound study about the complex and specific phenomenon of mining, the author tries to make clear the meaning of some notions, and to eliminate some contradictory interpretations he creates some definitions (for example, the author tries to define the general meaning in judicial terms of – mining activity, mining politics etc). The examination of the essential particularities of these terms from the mining domain continues to show interest not only from scientific point of view, but also from the practical point of view. This way, even nowadays the legislator outlines through the Law of mining „(2)” some legal definitions regarding for example to: mining activity, mining, radioactive ore, mining products, mineral resources etc.

Usually the state has an active role in the economical life. In our concrete case, regarding to the stimulation of validating the natural resources of the country, its interventional measures were composed by the creation of legal norms for the development of mining activity, the establishment of some institutions for mining education, taking some measures to assure transparency in the mining activity.

The author accentuates in this discussion another part of the problematic of mining, respectively the considerations of the interests of the state in this domain, accentuating that the following categories must be distinguished: interests of economical nature; interests of political-social nature; interests related to the private economical sphere; interests regarding to the national economy.

To offer for the specialists a perspective upon the ensemble of relations in the mining law, Gheorghe N. Leon – showing us a great documentation – outlines the historical evolution of these relations and of the systems of mining proprieties in different states (beginning with the system of Roman law and reaching some case studies from the English, French or Romanian law).

In every situation there must be clarified the aspects which are related to the interference between the object (the mineral resources) and the subject of mining law. Mainly, the above mentioned object could belong: to the proprieties of the surface (of the land) – the system of accession; to the state – the system of domain, the state owing the propriety rights upon the mineral resources, based on a collective title; to the „discoverer” – the system of concession.

The author states that in the matter of study of mining law from Romania we can discuss about three periods, respectively: the period of traditional laws (from the very beginning until the laws of Calimachi and Caragea), the period of written laws (from 1818 until Mining Law from 21 April 1895) „(3)” and that of the modern law (beginning with 1895).

The work of Gheorghe N. Leon contains for example a new element in the content of the Organic Regulations, namely the fact that the legislator is conscious about the need to assure the continuity of the mining of mineral resources taking into account environmental protection and the renewal of the environment in case that it is affected by the mining activities.

The necessity of promoting these ideas, admitted a long time ago, can be found everywhere. We can discover the actuality of this subject also nowadays, when, though there is a regulation frame which addresses itself to the resorting institutions, to mining operators, there are difficulties signaled in taking responsibility in the matters of the environment (for example in rehabilitation of mines etc.) and in the matters of registering the environmental degradations caused by these activities.

After a critical analysis of the Romanian legislation in this domain, the author suggests some measures to make more efficient the reform process in this sector, like: promoting the principle of free mining; promoting the system of concession, but a concession realized by respecting of some special regulations adopted in this matter; the institution of mining monopole; administrating mines as a propriety of the state and developing mining activities through particular companies (renting); the institution of the possibility that the state owns a part of the profit (represented by its rights for the benefits of the concessions, resulted from mining) or taking part from the mining activity, not only by benefits.

Proves of his constant preoccupation and even of his passion in approaching the problems from the domain of mineral oil are his works *Romanian oil and the new law project of mining* (Leon 1943: 303-313), respectively *Romanian oil and the politics of the state*.

Taking into consideration the appreciations of the time, according to which the legislation of mining from 1929 must have been modified, Gheorghe N. Leon in his work *Romanian oil and the new law project of mining* presented his own arguments for realizing these steps.

After serious theoretical and practical observations „(4)”, which were scientific discussed, the author presented the situation of the oil mining operations. Showing a great knowledge in the discussed domain, he was pleading for the modification of the law project of the judicial frame of the moment. The idea of reformation of the special regulations from the oil mining domain was based on economic (and also politic) realities of the country. Practically, there was a necessity of approaching under different complex and objective aspects of the politics of the state in the matter of oil mining. In the authors opinion the general directions of this politics must follow: „to assure the production sources and to assure the national security in the hands of the state, for the benefit of the nation; to create some resources for the necessities of the future; to assure the control of the state upon mining and oil industry” (Leon 1943: 304). Gheorghe N. Leon felt himself responsible to draw the attention of his contemporaries upon the fact that in states like Mexico, U.S.A., England, in the mining zones of *British India* and *Netherlands India* there was a unitary politic in this sector, and respectively one to assure „the ownership of the oil resources” for the conational under the control and guidance of the state (Leon 1943: 304). This measure directly aimed the participation of the nation by the resources of the country and it was in great balance with the necessity of preventing and fighting the forced and uncontrolled exploitation of some limited natural resources. Even more, the economists and politicians representants of this power had a great fight to create strategic reserves to assure future needs, the history of fighting for oil revealing us the fact, that one of the applied strategies was buying territories and of concession of mining of the territories belonging to other states. Even the American president Warren G. Harding – 1921-1923 – promoted the formula „Exploit as much oil as you can from other countries” (Leon 1943: 306).

In these circumstances, the author affirms with conviction that the new law must create a connection between oil mining politics on one hand and the politics of the state, on the other hand. The national priority is to assure some responsibilities in the matter of sustaining an intense

participation of the national capital by the mining and distribution of oil, under the control of the state.

In 1918, the proof of the power of the scientific-practical thinking of Gheorghe N. Leon is materialized under the form of a rich study upon expropriation – his research being important even in the conditions that the analyzed institution appeared as a restriction of the right for propriety. The work contains an exposition and an analysis of the doctrine and legislation in the matter of expropriation, the author suggesting for those who are interested a useful working instrument for the solution of some problems of the sensitive field of the special ways of giving birth to the proprieties of the state (this way we can mention requisition, confiscation, vacant successions etc).

In the text of the work there were developed and explained general notions regarding to the right of expropriation and some scientific ideas developed by the author related to the judicial justifications of expropriation or related to extent of the compensations. We must outline the fact that along the time in the literature of this domain there were announced a lot of definitions of the notion of expropriation, but the dominant conception was that expropriation was an „intervention” in the sphere of private law, especially regarding to propriety rights. Even more, this intervention was considered to be an administrative one. We also mention the fact that only through a legal disposition could a propriety right be restricted, but the concrete cases of expropriations could be established by the administrative power, in some limits established by law.

In 1918, continuing to observe the social-economical evolution and analyzing the financial problematic, Gheorghe N. Leon published the work *The financial problem and the matter of money*. We must also mention the professionalism and dedication of the author by dealing with this subject, which brought him the well-deserved acknowledgement, the work being awarded by the Romanian Academy (Leon 1930: 304).

Synthesizing the objectives treated by the author, we can point the central idea of the study and namely the existing relation between currency and public finances. In addition, there was discussed the solution to mobilize the soil – declared by some specialists of the time to be a saving one to dissolve the financial crisis.

In that moment the actuality of the subject was perceived also related to the negative impact of the World War upon the budgets of the belligerent states.

In the opinion of the author the preoccupations of the politicians with attributions in the domain of public finances must aim the preservation of the normal limits of currency emission and of accumulating gold to cover the existing currency. Besides, cautiousness in the matter of currency politics was and remains an essential characteristic, because the appearance of a currency excess generates negative effects like inflation etc. A substation importance in the study is represented by the presentation of the key-moments of the evolution of the currency system, because the anterior experiences can contribute to its future efficiency. This way, respecting the limits of an objective analysis, the author presents the continuous success or in other cases the recognized failure of some currency systems, like: the system of John Law – beginning in France in 1716; the reform project of Jacques Necker – in France 1789 etc.

Also related to currency politics we must observe that the author offers special attention to the fighting of the tendency of some doctrines to confuse two different notions: one being *currency* (money) and the other being *credit*. It is presented and proved through arguments a part of the economical theory and practice, which can be framed in the etatist school, for example the conceptions of Walter Federn or of Georg Friedrich Knapp etc.

The observations of Gheorghe N. Leon related to the functions currency standard can be sustained even nowadays, because regardless of the acceptance of money, its roles are

concretized as: instrument of transactions; standard of values; reserve of values (Basno, Dardac and Floricel 2003: 8).

On the other hand, the author suggests that currency has a key position in the functional mechanism of the economy and related to the currency system, reflects upon the benefits of the currency system based on the standard of gold.

The conclusion of Gheorghe N. Leon was that, the *fiduciary currency* had no capacity to eliminate or reclaim the effects of a financial crisis, because to sustain the system of public finances there is a need for real and not fictive values.

In the virtue of the sharp correspondence with the social-economical and political realities, Gheorghe N. Leon considers to be opportune the exploitation of the ideology of socialism in comparison with the accentuation of the model of individualism – these two notions being established through the prism of the impacts which these have upon the economy. The professor shared his conceptions related to the economical-financial principles of the socialist doctrine in the content of two works: *Socialism and economical individualism* and *Public administration and socializing*.

Gheorghe N. Leon, a personality with mature economical thinking, presents himself opened to embrace the possibility to solve the problems of the state with the help of social politics.

Keeping the same idea, through the prism of the diversity of the problems of economical life with which the state had to confront in the inter-war period and which limited its development, professor Gheorghe N. Leon proposes a concrete study upon the concepts of *public administration – private administration*, namely upon the phenomenon of *socializing* (nationalizing).

Thus, in his work *Public administration and socializing* the author attributes to the private administration (private domain), beyond abstract theoretical notions, a great importance for the existence of public administration. In reality, a large part of the incomes of the state is originating from taxes and fees upon particular incomes.

From the study it is clearly outlined the conclusion that a dangerous factor for the prosperity of the collective can be constituted by the „elimination fight” between public administration and private administration – in the opinion of Gheorghe N. Leon, it would be ideal the co-work of these two sectors (public-private) for the general benefit of the nation.

To have a complete imagine upon the implication of professor Leon in the study of the essential characteristics of the Romanian economy and finances, we must also mention his works *The history of public economy in Romania* and *Elements of financial science* through which there are outlined a series of principles of regulations from the studied domain, which are systematized by the author, illustrating this way the normative fundament of the economical-financial life.

The professor had a great contribution related to the presentation of the historical evolution of the Romanian public finances, publishing the work *The history of public economy in Romania* in a moment when the financial history of Romania was not well-known.

Structured on two parts (Part I *Public economy by Romanians before the foundation of the Participates* and Part II *Public economy in Muntenia and Moldova from the foundation until XVII century*) the work deals with the natural evolutional process of Romanian finances (the system of expanses and incomes, for example the system of services, domain incomes, customs etc). In choosing the subject, the author uses also his own experiences with the difficulties to create exhaustive documentations of a lecture of financial law for the students from Cluj „(4)”, because of the lack of some detailed researches in the domain of history of Romanian finances – this way he tried to cover the well-know lack, in university education, of some bibliographic sources elaborated for the above mentioned problem.

The complex sphere of public finances was presented in the work *Elements of financial science*, the first Romanian study of financial science, in which, based on some detailed researches the

author realized: *in the first volume*, a history of public finances, a presentation of its structure and the evolutionary perspectives of the public incomes and expenses and also a sketch for the announces reform in the system of indirect taxation, and *in volume II* there are conceptual clarifications upon the notion of budget and its executions, namely upon the notion of public credit.

Under the prism of his own research and processing methods used in his works, Gheorghe N. Leon in his work *How to write a book. With special attention for political economy*, militates for analyze and synthesis, induction (based on observing facts) and deduction (based on the generalization of the consequences of some actions), statistical method etc. Furthermore, the professor reveals the fundamental importance of the research methods in the scientific process, stating that: „the method is indispensable for scientific research. Without its help, the most elementary truths can avoid our attention. No one must rely on his good senses, on the brightness of his own intelligence... because one can easier succeed with not so much intelligence, but prepared with a good method, as with a bright intelligence but without any method”.

Undoubtedly our study cannot cover the multitude of researches developed by professor Gheorghe N. Leon, of the controversies and common opinions related to the revealing of the importance of his works in the development of the Romanian economical-financial sciences. But by mentioning in our discussion a part of his works there are outlined a series of theoretical and practical aspects presented by professor Leon in an extremely captivating and important domain.

Notes:

„(1)”We must mention the existence of an objective review of the work, realized by a professor of University from Vienna, E. H. Vogel who had written: „In his interesting critical conclusion upon the taxation system from Romania, the author proves that the indirect taxes in an agrarian state like Romania are very variable, because of the relation of climate and crop, and because of it the disproportion between the incomes of direct and indirect taxes announces a need for a reform of direct taxation. The praiseworthy work offers us an interesting view in the matter of taxation research from Romania and not only and it is a literature full of value” (Leon 1930: 3-4).

„(2)”Art. 3 from Law No. 85 from 18 March 2003 – law of mining, published in the Official Monitor of Romania No. 197/27.03.2003, with the ulterior modifications and completions.

„(3)”The mining Law from 21 April 1895 was important for the development of the mining industry in Romania, organizing mining activities, offering guarantees for the invested capital. Following the argumentations of the legislator it is outlined the idea that the exploiting of mines, the creation and development of the different industries from our country made it necessary to adopt this law. Only by establishing, offering guarantee and regulating the relations between capital, the owner of the territory and the specialists of the domain, we could hope in the development of mining.

„(3)”Gheorghe N. Leon mentions that his was sent abroad by the Institution of Geology from Romania (under the management of prof. L. Mrazec) to study the promlem of mineral oil related to the economical and political interests of the country.

„(4)”The professor had taken into consideration the creation of the work *Elemente de știință financiară*.

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WEATHER INDEX- THE BASIS OF WEATHER DERIVATIVES

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This paper approaches the subject of Weather Derivatives, more exactly their basic element the weather index. The weather index has two forms, the Heating Degree Day (HDD) and the Cooling Degree Day (CDD). We will try to explain their origin, use and the relationship between the two forms of the index.

In our research we started from the analysis of the weather derivatives and what they are based on. After finding out about weather index, we were interested in understanding exactly how they work and how they influence the value of the contract. On the national level the research in the field is scares, but foreign materials available.

The study for this paper was based firstly on reading about Weather Derivative, and then going in the meteorological field and determining the way by which the indices were determined. After this, we went to the field with interest in the indices, such as the energy and gas industries, and figured out how they determined the weather index. For the examples we obtained data from the weather index database, and calculated the value for the period. The study is made on a period of five years, in 8 cities of the European Union.

The result of this research is that we can now understand better the importance of the way the indices work and how they influence the value of the Weather Derivatives.

This research has an implication on the field of insurance, because of the fact that weather derivative are at the convergence point of the stock markets and the insurance market.

The originality of the paper comes from the personal touch given to the theoretical aspect and through the analysis of the HDD and CDD index in order to show their general behaviour and relationship.

Keywords: Weather derivatives, Weather index HDD, CDD

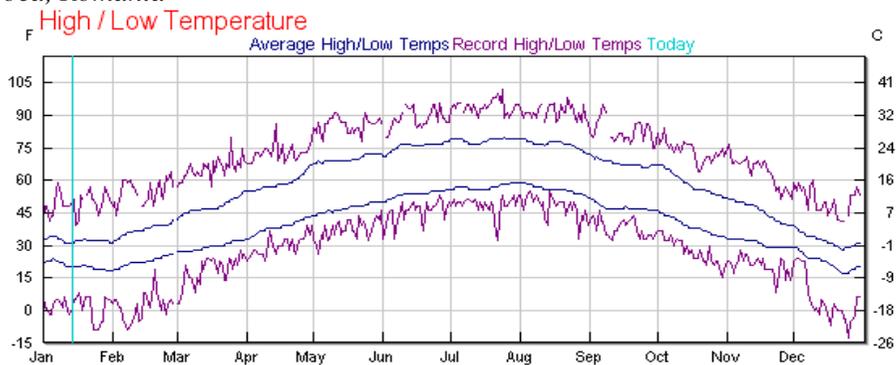
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Weather index - the basis of Weather Derivatives

In order for giving protection against the consequences of extreme weather events, Weather derivatives have as underlying assets a variety of weather variables. Weather Derivatives can be structured accordingly to one or more variables. The most common used variable is *temperature*, either hourly, daily minimum or maximum, or as a daily average. By international consensus, in most countries, the average daily temperature is the arithmetic mean of the maximum and minimum temperatures recorded for a period. In some countries, however, the average daily temperature is calculated as weighted average of values recorded per two day. The time of day when the recording of these temperatures takes place, the method of determining these temperatures can also vary from a country to another. To participate in the weather derivatives market transactions it is needed to examine in detail the meteorological measuring system practiced by each of the country in which weather derivatives are composed and then traded. It is generally known that in the U.S. the measurements are made in Fahrenheit degrees, and in the rest of the countries they are made on Celsius scale.

As an example of heat minimum and maximum values, the chart below shows the minimum, maximum and daily average recorded in Cluj-Napoca, Romania, in 2008.

Chart 1. Evolution of daily minimum, maximum and average daily temperatures, in 2008 in Cluj-Napoca, Romania



Source: Data processed by author using information available on www.wunderground.net

In this chart we graphically illustrated thermal maximum and minimum records in Cluj-Napoca in the year 2008. The dark blue line shows the average temperature in its two forms, maximum and minimum. The purple line stands for the daily fluctuations of the temperatures and turquoise vertical line, represent the value in the day that the data were extracted.

This chart shows the evolution of the minimum and maximum daily values, and also of the daily average, thus we are able to observe the trend manifested by the weather indices. For Cluj-Napoca, the temperature reaches its highest level in July (about 40C) and the minimum is recorded in late December (approx.-24C).

Alongside the temperature, wind and rain measurements can also underpin weather derivatives. Protection against **wind currents**, for example, are of interest to wind "farms" that want to contract these weather derivatives to protect themselves against the decline in wind speed, or in the construction industry, which would have to stop work in the winds blows too strong(e.g. for "sky-scrappers"). These contracts can be also used to replace traditional insurance policies for events such as damage caused by powerful winds, protection of future investments against events as *abundant rainfall* in the agricultural sector or *drought* for the hydro-electric industry. Protection of these events are relevant as are heavy snow falls of interest to mountain resorts, municipalities that must clean the roads in winter, but also for companies that sell products related to the cold-season, such as sport equipment or winter car-tires.

These are contracts that are based on such variables as *the number of sunny hours in the day, the temperature of sea water or river flows*.

In order to plan and build such a weather derivative we require accurate and reliable weather data.

Correlation between relevant meteorological variables and their impact on economic activity that needs protection will vary from one weather event to another and from a company to another. Thus, the contracts will be individualized and constructed on indices that accurately reflect both probability of occurrence and its effects.

Meteorological indices can be defined as the number and characteristics attributed to a phenomenon, process or other complex weather events. Indices that are most commonly used as base for weather derivatives contracts are indices of daily temperature, average temperature index, average cumulative index and heat index weather event. In this paper we will explain the importance of daily temperature index.

Daily temperature index

Using Daily indices is rooted in the energy industry and they are so constructed as to show domestic demand for heating or cooling. Weekly and monthly records of the index can be used also for monitoring and planning further needs, its costs and the heating cost for buildings which have performing air-conditioning systems. Annual records may help in predicting future expenditure for this purpose.

It should be noted that the United States, where the temperature is measured on the Fahrenheit scale, the core temperature (base temperature) for contracts is of 65F (18.33C), and in other countries, where they use the Celsius scale, the basis temperature is set at 18C (64.44F).

Heating Degree Days (HDD)

The Heating Degree Days is a measure designed to reflect the daily need of heating of a home or office space, and thereby is a way of measuring how cold it is (if it is colder the heat demand is higher). There are a variety of ways of defining HDDs used by the energy industry, thus reflecting the differences in consumption between cities, showing that there is a correlation between the ways of defining heat necessity and how well the index reflects the demand. The most common definition of the HDD index for the weather market is:

$$z_i = \max(T_0 - T_i, 0) = (T_0 - T_i, 0)^+ \quad (1.1)$$

Where: T_i - the average temperature in day i

T_0 - base temperature⁶⁰ determined by the contract

During this paper we will assume that the formula depicted above is the calculating formula for HDDs. On a period of N_d days is defined as the sum of daily HDDs during the study:

$$x_{HDD} = \sum_{i=1}^{N_d} z_i \quad (1.2)$$

The daily heat is higher in winter and weaker, almost zero, during summer. In many locations where the heat daily index is of interest, average temperature are recorded in certain periods do not exceed the 18C/65F limit, so the HDD index is always positive.

⁶⁰ Base temperature= temperature that by its variation determines the Heating Necessity or Cooling Necessity. This temperature is often regarded of having the optimal value of 18C(65F)

Table 1 Monthly average number of HDD used in the period 01.01.2006 to 31.12.2010, for 8 European cities. Data are related to a contract with the base temperature of 18C.

Month/City	London	Amsterdam	Stockholm	Paris	Vienna	Budapest	Bucharest	Sofia
January	374	475.2	581.2	Id ⁶¹	505.8	494	547.6	535
February	335.8	421.2	496.6	Id	401.4	389.2	411	442.6
March	315.2	383.8	444.2	Id	323.8	287.8	302.8	339.2
April	245.4	246.2	290.8	Id	176.2	148.8	154.4	183
May	173.2	190	187.6	37.2	119.2	84.2	67	101.2
June	79.8	96.2	125	12.6	44.4	33	17	42.4
July	39.6	44.8	61	3.2	26.4	21.2	6	28
August	59	95.8	89.8	9.4	42.6	30.4	8.2	28.6
September	108.8	127.4	257.8	19.8	129.4	162	131.6	95.2
October	200	231.6	409.8	41.6	305.8	274	263.6	271.8
November	308.4	315	474.6	66.8	363.4	340.6	413	322.6
December	423.4	473	596.2	111.8	501.2	511.2	561	505.6

Source: Authors processing data available on www.degreeday.net

⁶¹ ID – Incomplet Data

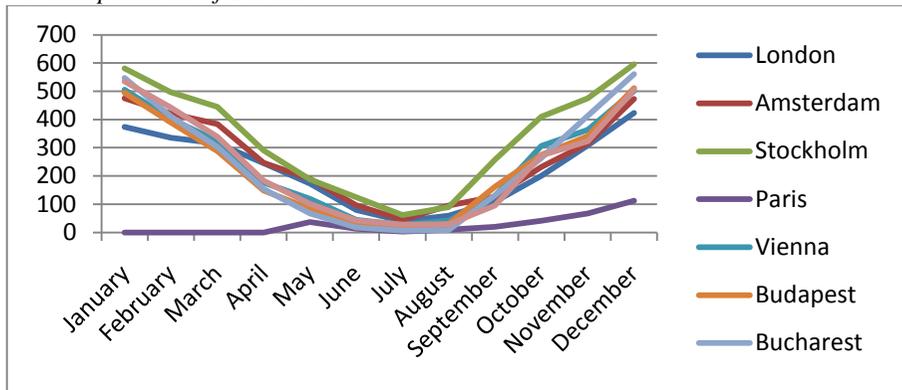
Our purpose is to highlight the monthly HDD values. In the study we chose to analyse cities from Europe, in order for the information to be relevant to the study. The data from (Table 1) shows eight cities from the EU. In the selection process we tried to choose the cities in such a way to minimize errors from the calculations. The period of study is of five years, from 01.01.2006 to 31.12.2010,

Processing the data presented difficulties for Paris, because of the lack of data for this location, only the data of 2010 are available. This lack of data explains why the general data for Paris are less than for the cities nearby, one such example is London.

We can also see that the highest values were recorded in January and December.

From (Chart 2), we note that this index is at maximum level in Stockholm in December. At the opposite point is London, which presents the lowest values for all the studied period. Although the graph shows that Paris would have the lowest value, we can't prove it because of lack of data.

Chart 2. Chart interpretation of Table 1.



Source: Data processed by the author using information available on www.degree-day.net

The use of HDDs in the construction and trading of weather derivatives are used in the USA and Europe, and rarely in Japan.

Cooling Degree Day (CDD)

The daily cooling requirement is mainly used to measure summer energy demand for cooling, so determining how hot is (if it is warmer, the CDD need is higher). Heating systems are powered by electricity or gas, but cooling systems are mainly powered by electricity. This is one reason why CDD's are more relevant to the electricity market. Because electricity is generated recently from natural gas, the CDD's are becoming relevant to the gas industry also. The number of days that require CDD's is calculated:

$$z_i = \max(T_i - T_0, 0) = (T_i - T_0)^+ \quad (1.3)$$

As for the HDDs, the index is the sum over a period N_d of CDDs during the studied period.

$$x_{CDD} = \sum_{i=1}^{N_z} z_i \quad (1.4)$$

Tabel3. Monthly average CDD numbers for eight European cities, in the 01.01.2006-31.12.2010 period. Data is consistent for contract with a base temperature 18C

Month/City	London	Amsterdam	Stockholm	Paris	Vienna	Budapest	Bucharest	Sofia
January	0	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0.2	0.4
March	0	0	0	0	0.4	0.6	1.2	2.4
April	4.6	4.2	2.8	4	10.2	16.6	23.2	16.6
May	17	8.8	7.4	7.6	27.2	46	64.4	59.8
June	36.8	32.8	27.6	25.2	64.6	78	145	103
July	50.6	63.4	76	75.8	121.8	151.2	194	145
August	38.6	38.6	32.6	36.8	91	122.6	239.6	152
September	12.2	8.2	2.6	12.4	23	28.2	73.4	59.2
October	1.6	2	0	5.4	3	4.2	5.4	9.4
November	0	0	0	0	0.2	0	3.2	3.4
December	0	0	0	0	0	0	0	0.4

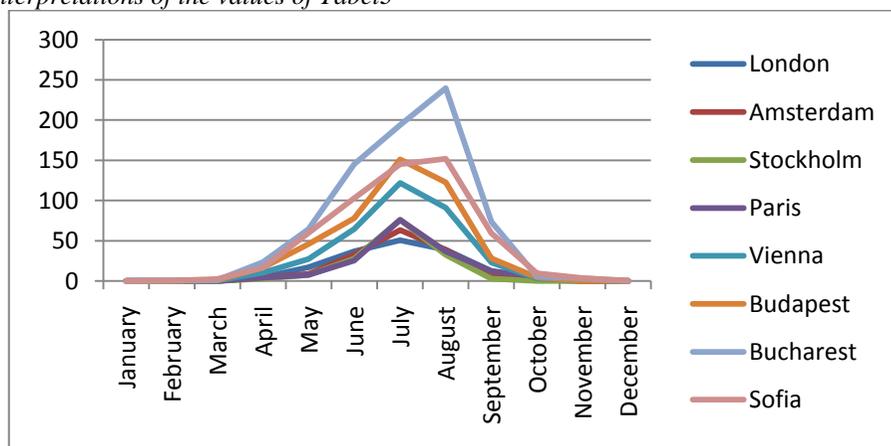
Source: Data processed by the author using information available on www.degree-day.net

In this analysis we used the same location as for the Heating degree days. London is the main market for weather derivatives in Europe; thus taking into account the nearby cities that show interest in these derivative contracts, as Paris and Amsterdam. I chose Stockholm to exemplify the developments and use of thermal indices in Scandinavia. Vienna, Budapest, Bucharest and Sofia have been selected because they are located in Central-Eastern Europe.

(Tabel3) emphasizes that the daily allowance of coolness, the figures show the opposite then in the case of the HDD index. The CDD index grows in value over the warmer months, reaching its peak in July and August, and in January and December the index is almost null.

From (Graph4) we can see that the maximum value is recorded in August in Bucharest and the lowest in Stockholm also in August. Here we see the formation three groups of cities: Bucharest – which is separated with the highest values; followed by Sofia, Budapest and Vienna, and the lowest values are in the third group formed of London, Amsterdam, Paris and Stockholm. The lowest of the low values are recorded by London and Stockholm. This fluctuation can be also explained through Geography, by the cities situations on the meridians.

Graph 4. Interpretations of the values of Tabel3



Source: Data processed by the author using information available on www.degreeday.net

Derivatives based on CDD's are usually traded in the U.S., however, they are rarely trade in Europe and Japan.

The relationship between and HDD and CDD

The total amount of HDD's and CDD's sites in a given day is shown by the insignificant deviation of the average core temperature: in one day neither HDD nor CDD are zero, or when both are zero then the day temperature is equal with the normal values recorded. Thus, it is apparent that neither HDD nor CDD can have a negative value.

Conclusion

The analysis conducted in this paper, shows that the most common indices used in weather derivatives contracts are the HDDs and CDDs.

In my opinion, this is because weather events can be easily reported as temperature fluctuations in different periods, fluctuations that are accompanied by additional weather phenomena's. Examples would be the case of the low temperatures, which often are accompanied by winds; moisture that is accompanied by rain and atmospheric pressure increase, or excessive heat that can cause drought.

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FISCAL DECENTRALIZATION AND FISCAL AUTONOMY IN THE EU MEMBER STATES

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In the process of fiscal decentralization sub-central governments have gained access to different fiscal resources, but the autonomy in setting the taxes is a key issue when analyzing the degree of decentralization. In this paper we calculated an index of tax autonomy for the EU Member States based on the OECD methodology of classification of sub-central taxes according to the degree of control over these taxes. We have shown that the design of intergovernmental fiscal relations is significantly different among the Member States, and taking into consideration the discretion over sub-national taxes provides a valuable insight on the fiscal decentralization design.

Keywords: fiscal decentralization, tax autonomy, intergovernmental fiscal relations

JEL codes: H71, H77.

Introduction

When analyzing the degree of decentralization we must take into account two important aspects. First, it must be identified the division of responsibilities and resources between different levels of government. The degree of fiscal decentralization is, thus, determined by the volume and importance of responsibilities and revenue assigned to subnational governments. Second aspect, refers to distribution of decision-making powers, i.e., the degree to which decisions to collect and allocate public resources are decentralized. A state in which local authorities have a real autonomy in allocating their expenditure and collecting revenue is more decentralized than another state where local revenue and expenditure are set centrally, although the vertical distribution of public expenditure and revenue is identical in the two states (Stegărescu, 2005: 304).

The indicator most widely used in literature to measure the degree of fiscal decentralization is the share of local expenditure or revenue in total government expenditure, or, respectively, in consolidated general government revenue. Although it is an imperfect indicator of the degree of decentralization, in order to have a standard variable, calculated on the basis of uniform definitions among states, it is used in most studies on the causes and effects of fiscal decentralization (Ebel and Yilmaz, 2002). This indicator's major advantage is, on the one hand, the availability of statistical data, and, on the other hand, the comparability of the results.

An important limit of this indicator refers to the impossibility of determining the vertical structure of decision-making powers. It shows only the revenue and expenditure of subnational authorities, without providing any information on the decision regarding taxation and spending by destinations. Thus, there are many situations where some public spending is performed locally, but the expenditure destination is predetermined by the central government, and they appear in statistical data as expenditure of local government. Also, statistical data do not provide qualitative information on the nature of revenue included in local budgets, because they make no distinction between conditional and unconditional grants, or between tax levies independently

determined and imposed by national legislation. In the analysis of intergovernmental grants, is equally important the distinction between those allocated on the basis of objective criteria using allocation formulas, and those allocated on a discretionary basis.

For these reasons, the share of revenue or expenditures of local budgets in general consolidated budget revenue or expenditure tends to overestimate the degree of fiscal decentralization. Thus, to capture more accurately the degree of decentralization, numerous studies over time have been introduced also non-fiscal variables. For example, Treisman (2002) in order to measure fiscal decentralization has used, along with fiscal variables, a number other variables such as: the number of levels of government, election decentralization or even the share of local public employees in total government employees. Arzaghi and Henderson (2005) have built a decentralization index based on nine variables, including: the vertical structure of government, requirement that local or regional representatives are elected democratically, autonomy in setting local taxes or the ratio between conditional and unconditional transfers.

In this framework, since the share of local revenue and expenditure in total public revenue and expenditure tends to overestimate the degree of fiscal decentralization, in order to have a more accurate descriptor a more detailed analysis of the structure of local tax revenue is necessary.

OECD methodology for classification of tax revenues

In the fiscal decentralization literature there have been several studies that have attempted to quantify the degree of fiscal autonomy of sub-central governments (Pola, 1999; Blankart, 2000; Stegărescu, 2005). Among them is the most detailed study is the one made by the Organization for Economic Co-operation and Development, *Taxing Powers of State and Local Government*, which provided a methodological framework for classification of sub-central taxes according to the degree of autonomy in their determination.

The concept of “tax autonomy” captures various aspects of freedom sub-central governments have over their own taxes. It encompasses issues like sub-central government’s right to introduce or to abolish a tax, to set tax rates, to define the tax base, or to grant tax reliefs. In a number of states taxes are not assigned to one specific level of government but shared between the central and local governments. Such tax sharing measures deny a single local government any control on tax rates and bases, but collectively local authorities may negotiate the sharing formula with central government. Thus, to classify the sub-central tax levies according to the degree of autonomy over them, must be taken into consideration: the powers conferred by law to local authorities to set tax rates, to evaluate the tax bases and to administrate the tax revenue.

Assuming that only taxes that can be set independently and on which local authorities have legislative powers ensure real fiscal autonomy, tax revenues are classified into five categories depending on the degree of control over them. Categories are ranked in decreasing order from highest to lowest taxing power. Category (a) represents full power over tax rates and bases, (b) power over tax rates, (c) power over the tax base, (d) tax sharing arrangements, and (e) no power on rates and bases at all. In order to capture the more refined institutional details the (d) category was further divided into four subcategories to illustrate the many different rules for governments to determine and change their own share.

Local or regional authorities have greater autonomy on revenue included in categories (a) to (d.2.) and on the other, from (d.3.) to (e) they have no control. Basically, the latter are very similar to intergovernmental grants.

Table 1 Classification of local taxes according to the degree of autonomy

(a)	SCG set the tax rate and the tax base;
(b)	SCG set the tax rate only;
(c)	SCG set the tax base only;
(d)	Tax sharing arrangements:
(d.1.)	SCG decide the revenue split;
(d.2.)	Revenue split can be changed only with the consent of SCG's;
(d.3.)	Revenue split may be changed unilaterally by a higher level government (by legislation);
(d.4.)	Revenue split may be changed unilaterally by a higher level government (determined annually by budget laws)
(e)	CG determines tax rate and tax base.

Source: OECD, *Taxing Powers of State and Local Government*, OECD Tax Policy Studies, nr.1, 1999, pp.11.

The study mentioned above preceded to allocation of tax revenues in each of the five categories, and then to calculate the percentage of each category in total, achieving such a detailed structure of tax revenue according to the degree of autonomy in setting them. Of course, this grouping of tax revenue does not fully reflect the degree of local financial autonomy. For example, even if local authorities can determine both the level of tax rates and the tax base, such autonomy may be restricted by law, imposing certain limits that they can choose tax rates between or some assessment criteria of the tax base and, in this case, the revenue generated by these taxes are still falling into category (a). However, we believe that this methodology for the classification of tax levies is a very useful tool to assess local autonomy.

The structure of local and regional taxes in the EU Member States

The structure of public sector internal financial relations and tax legislation differs greatly from one state to another. For this reason, it is impossible to use uniform rules for allocating tax revenues between the five categories. To ensure proper division of taxes, in addition to a detailed structure of tax revenues, also knowledge of tax law provisions in each state is necessary.

Since 1999, the Organization for Economic Co-operation and Development publishes periodically in the report entitled "*Fiscal Relations Across Government Levels*" detailed information on the structure of tax revenue in OECD member states. Thus, we used the results from its latest publication, "*The Fiscal Autonomy of Sub-Central Governments: An Update*", 2009, for Member States of the European Union. The latest revenue structure, extracted from the mentioned report, is that for the year 2005. For countries that are not part of the OECD, we have taken information from an earlier report, "*Fiscal Decentralization in EU Applicant States and Selected EU Member States*". It was completed to evaluate the status of fiscal decentralization in states that joined the European Union after 2004.

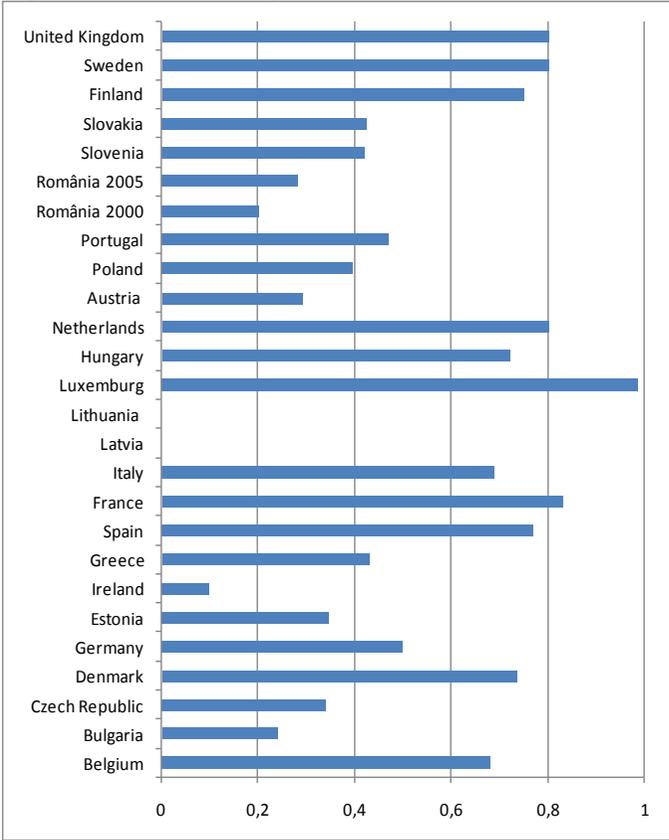
To ensure comparability of results achieved in the case of Romania, with EU Member States we calculated the structure of tax revenue for 2005 and 2000 to show their evolution. Thus, we classified each type of tax in one of five categories, then, using data on local budgets from the Statistical Yearbook of 2007, we calculated the percentage of each category in total.

The tax autonomy index

Using the calculated structure of tax revenue we built an index of tax autonomy for the EU Member States. The index's values indicate the degree of local and regional governments control over their own tax revenues, ranging from 1, signifying a complete autonomy in determining

local taxes, and 0, no control over taxes, i.e. all taxes are set by the central government. In this setting, we multiplied the shares of each taxes that fall in the (a) category with 1.00, (b) with 0.8, then, categories (c) to (e) with 0.7, 0.6, 0.5, 0.3, 0.2, 0, and, respectively, 0.1. For federal states we calculated an average of indices obtained at regional and local level, weighted by the tax revenue volume raised by these two levels of government.

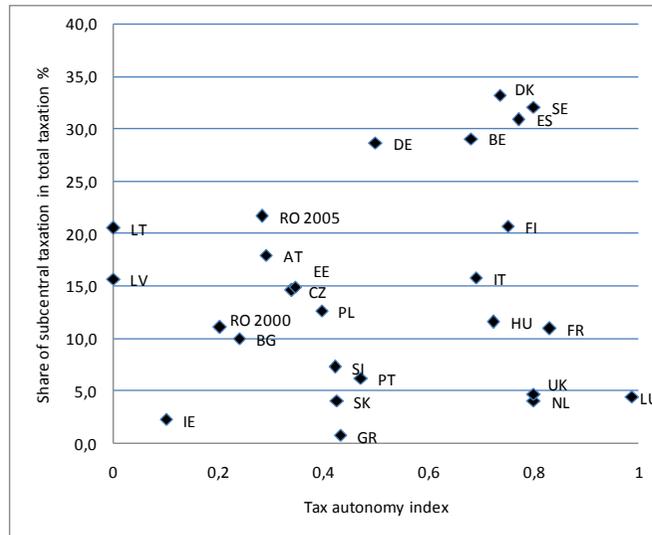
Figure 1 Tax autonomy index in the EU Member States



As shown in Figure 1, there are significant differences in terms of fiscal autonomy of local and regional governments in the EU Member States. In Lithuania and Latvia all local taxes are determined by the central level, while in Luxembourg, local authorities enjoy almost complete freedom to set taxes. In this state 98.5% of local tax revenues are in category (a), local authorities having exclusive competence to determine tax rates and tax bases. Other states where local authorities have greater control over local taxes are France, Britain, Netherlands and Sweden. In Romania, the index increased from 0.2022 in the year 2000 to a value of 0.2825 in 2005. The most important factor contributing to this change is represented by changing the methodology for determining the share of splitting the income tax, which in 2000 could be modified through the annual state budget law, and in 2005 they had a fixed level, established by legislation (Local Public Finance Act).

In Figure 2 we grouped the EU Member States both in relation to the importance of subnational taxes and on the basis of tax autonomy. Tax revenues of local budgets include, in this case, also revenue from tax sharing arrangements. Their distribution by level of government is taken from the Eurostat report, *Taxation Trends in the European Union, 2009 edition*.

Figure 2 Tax autonomy index and the importance of sub-central tax revenues



Thus, we can group the Member States in four categories:

- states where local governments receive a large share of total taxation and have high autonomy in terms of their determination, such as: Sweden, Denmark, Spain, Belgium, Germany and Finland;
- states with a high volume of tax revenue available to subnational governments, but they have limited powers in setting those taxes, like: Lithuania, Austria and Romania;
- states where local authorities have significant powers to set taxes, but their tax revenues are modest, such as Luxembourg, Netherlands, Britain, France and Hungary;
- states where subnational governments have only a small share of total tax revenue and also have limited decision making power to determine them, such as Greece, Ireland, Bulgaria, Slovenia and Slovakia.

Conclusions

Fiscal decentralization tendencies are obvious in the majority of EU Member States in the recent years, and, thus, increasing subnational governments' responsibilities requires more tax revenue at this level. But since traditional local taxes (property taxes, user charges) are insufficient to meet the requirements, many subcentral governments rely heavily on various tax sharing arrangements and intergovernmental grants. In this setting, fiscal decentralization literature shows that the common measures of fiscal decentralization, i.e. the share of local expenditures and revenues, clearly tend to overestimate the degree of fiscal decentralization.

We have shown that regional and local governments in the EU have little discretion over their own taxes. Typically, in the old EU Member States subnational governments have superior control over their own taxes. In the federal states such as Belgium and Germany the local governments have greater autonomy in setting taxes than regional governments, while in Spain and Austria regional authorities enjoy greater taxing powers.

The correlation between different measures of decentralization is weak. For instance, some states with high share of local taxes permit only little discretion over the tax rates and tax bases, while others enjoy great tax autonomy but have limited fiscal resources. Thus, the design of fiscal relations across levels of government varies greatly among EU Member States and there is no single pattern of fiscal decentralization.

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STANDING'S PLACE AND ROLE IN THE FINANCIAL ANALYSIS OF THE ECONOMIC ENTITY

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In this paper, the authors present the methods of determining the company's financial standing, based on its financial reporting. Hence, in the debate are included concepts commonly used in financial literature and banking practice such as credit worthiness, credit rating and standing.

Keywords: financial standing, creditworthiness, rating, credit-standing

JEL Classification: G32

1. Introduction

Modern and efficient management of an entity must be evaluated using financial performance criteria, covering on one side operational activity and on the other side the actual financial activity conducted over a period of time determined usually by the financial exercise.

With respect to this, many analysts have designed and developed an assessment model of the entity's business based on score, a model that highlights the financial standing of the entity at some point in time. They consider that in between two successive moments of the financial position, reflected by the balance sheet, respectively the beginning and end of the financial exercise, intercedes the work carried out by the firm whose efficiency or inefficiency is reflected in the results, that is the profit and loss account.

2. The Importance of Financial Standing in the Current Financial Crisis

With the help of financial standing, managers can always find out why a company has not paid its debts to suppliers, budgetary obligations, why customers have not been asked to pay for services they received and what are the causes that led to a lack of cash resources. The reason for designing and making some models of standing is that from the beginning of 2010 nearly 16,000 entities have entered into insolvency, twice compared to the entire year 2007. The value of checks and promissory notes issued without coverage reached almost 450 million Lei in September 2010. Analysts stated that this fast growth in the number and amount of payment incidents is due to the economic crisis, which led to financial blockage. Therefore, now more than ever, managers must find out the financial situation of their business partners.

The National Bank of Romania has a database with information about all entities that generated payment incidents, entities that have issued checks and promissory notes without coverage. In order to find out information about an entity, one must seek the services of a bank, which charges a fee to query the CIP database. By consulting this database, one can find out both the payment incidents in which a business partner was involved and also if the serial number of the check the business partner has issued is part of a set of payment instruments approved by The National Bank of Romania or whether this check was previously declared to CIP as lost, stolen, destroyed or withdrawn from circulation.

Specialized Romanian sites can be used to find out financial information about companies, namely from “bonitate.ro” or “vrajitorul.eu”. Moreover, information is also obtained from the databases of the Official Gazette, the Securities Guarantees Archive, the Trade Register or the Insolvency Report. Another solution for a brief check of a business partner is checking public databases. On the website of the Ministry of Finance, financial information of all Romanian companies can be found, both regarding the balance sheets and the profit and loss account. The data provided by the Ministry of Finance must be analyzed and interpreted, in other words a score that reflects the entity’s financial standing must be set.

3. Method and Results

Economists generally believe that is ideal for a business to have had a profit in the last three years of activity. Another important indicator is the degree of indebtedness, calculated as the ratio between equity capital and permanent capital (medium and long term debt plus equity). A share below 30% of equity in total resources available to a company, medium and long term is considered unhealthy. Also, some economists believe that a business with no financial problems is one with general solvency (measured as the ratio between current assets and fixed assets on the one hand and total debt of the other hand) above 1,2.

Financial data in raw form is not always useful. This is why it’s easier to call upon the services of consultants specialized in analysis of standing. In Romania, there are consulting companies that provide more comprehensive reports on companies, including a “credit rating” which assesses the risk of insolvency of a business, based on a scale from 0 (insolvency proceedings pending) to 10 (non-existent risk).

The rating of a company takes into account both the company’s financial indicators (standing indicators, in our view) and qualitative factors such as company’s development, payment system, changes in the number of employees, etc. The way the company has met its payment obligations is also considered. A model of the entity’s standing takes into account the financial performance indicators to be used for estimating the economic value, value creation and future earnings potential in that business.

Most often, some of the following indicators are used in assessing a business performance: net result; operating result; operating cash flows; residual result; value added.

Out of the profitability indicators, the *net result* is the best known. Because of its normative character, it has a limited utility for investors. Analysts generally prefer performance indicators that are not bound to the results.

Operating result is the result before tax and financial expenses, which refers to the ability of managers and employees to create value whatever the tax rate and capital structure is. Operating result is often used as a performance indicator in the analysis of financial statements.

Operating cash flow provides investors with additional information beside the net income. In the U.S., operating cash flow has significantly changed with the introduction of SFAS 95 in 1987. In Europe, the International Standard IAS 7 is according to SFAS 95. This standard has specific rules for calculating treasury cash flow, which is nothing more than the reconciliation between the profit and loss account and balance sheet modifications. For countries that do not adopt these rules, operating cash flow remains an estimated number.

Residual result is the net result less invested capital cost. In recent years, this indicator has gained increased interest. A small but growing number of businesses select this indicator for determining the remuneration of managers.

Value added is the measure of overall performance which is distributed to all partners of the business. The concept of value added aims to provide an indication of the business contribution to national wealth creation.

In the specialty literature, there are opinions (Turliuc and Cocriș 1997: 294) that in the analysis and evaluation of the borrowers performance based on data from the balance sheet and income statement, banks can determine the creditworthiness of customers situation, using for this purpose a system of structure and performance indicators:

- *structural indicators*: turnover; equity; working capital, working capital requirements; net treasury; liquidity (as a milestone, it can be immediate, current and at a future date); solvency; the degree of indebtedness (it is taken into account an overall level of debt and a financial leverage); rotation speed (is determined as index or duration of specific balance sheet items);
- *performance indicators*: profitability can be expressed as the rate of operating return (gross or net), rate of economic return and rate of financial return; financial risk expressed as a degree of covering interest; the rate of value added; share of dividends from the net result.

By corroborating the results of creditworthiness' indicators, the bank can highlight the trader's financial situation marked by "strengths" and "weaknesses", which will make the credit decision to be well reasoned. (Turliuc and Cocriș 1997: 294) As it can be observed, in the banking environment, the *creditworthiness* of the company is of high importance and in the business environment the focus is on the company's *financial standing*, namely on its *rating*.

In their book, Costin Kirișescu and Emilian Dobrescu state that creditworthiness is "a form of trust that a person or legal entity has upon completion an economic and financial transactions, especially credit-based" (Kirișescu și Dobrescu 1998: 43). As a result, *creditworthiness* endorses first of all accessing a credit. This way, bank management specialists believe that the *analysis of the borrower's creditworthiness* represents an important step in the process of bank lending. (Trenca 2004: 179) At this stage, based on documents provided by the client, the bank reviews the documentation for the credit. The need to analyze the economic and financial situation of the client is generated by the bank's need to know all the elements necessary for the credit decision. (Trenca 2004: 179)

In this analysis, a very important aspect represents establishing the creditworthiness of the borrower. Banks, in general must make sure the customer is creditworthy, *which defines, in fact, his ability to support debt service, respectively to repay that loan at maturity and pay interest, and also to prove the existence of insuring guarantees*. (Trenca 2004: 179)

In the context of economic and financial analysis of customers, banks often encounter a question that experts have tried to answer to, namely that if the *client's creditworthiness* established historically can be a compelling argument for future lending. (Trenca 2004: 179) Often it is argued that, in the lending process, excessive reliance that banks show towards *indicators of creditworthiness* resulting from past activities makes the decision of granting or refusing future loans not to be always correct. From this point of view, it would seem that in the process of assessing the credibility of the customers through the *past (historical) creditworthiness*, the ex-post analysis should be given less importance. Analysts should insist on the future, projected work, which otherwise is the purpose of the requested loan, in order to maximize certainty in drawing conclusions. (Trenca 2004: 179)

Other experts believe that creditworthiness can be evaluated (credit rating = *evaluating creditworthiness*) often in the form of a numeric or alphanumeric score (for entities or individuals), so that entities can decide whether to trade with that company or grant a loan to a person. (Koch 2001: 84)

In the Explanatory Dictionary of Romanian Language, creditworthiness is explained either by "credit and payment capacity of a person or an institution" or by "solvency". The term comes from the German word "*Bonität*". (Coteanu, Seche and Seche 1998: 107) In other words, creditworthiness can be characterized by these qualities of the entity. By creditworthiness, other specialists understand "the confidence that some people inspire when applying for a credit;

solvency (being creditworthy is derived from the French *solvabilité*)". In the same time, specialists state that creditworthiness and "good standing" have the same meaning.

In other papers, the term *creditworthiness* is translated as *financial solvency*, solvency, funding capacity. Therefore, some authors regard the three concepts as equal. Also, the word solvency is translated as "credit – standing". In our view, creditworthiness is the degree of confidence that can be drawn between two subjects. Financial standing concept is used in different papers with no explanation of its scientific content. That is why we will focus on it in the following paragraphs.

Romanian financial banking regulators have established for all credit institutions level a number of regulations based on which they periodically assess the performance of borrowers in order to build up reserves in the banks. (Romanian National Bank Regulation No.5/22.07.2002 on the classification of loans and deposits, and the establishment, adjustment and use of credit risk provisions, published in the Official Gazette No.626/ 23/08/2002). Financial performance represents the reflected economic potential and financial strength of an economic entity, obtained after analyzing a set of *quantitative* factors (financial and economic indicators calculated based on compiled data from annual and periodic financial statements, referred to as financial statements) and *qualitative* ones.

The assessment of financial performance of an economic entity will lead to its inclusion in one of the five categories of financial performance (A-E). This assessment is done according to internal rules of credit institutions, based on scores assigned to quantitative and qualitative factors. *Quantitative* factors relate mainly to the following indicators: liquidity, solvency, profitability and risk, including currency risk.

Qualitative factors include at least aspects of the way the analyzed economic entity is administrated: the quality of ownership, collateral received (other than those which are to reduce the exposure to the debtor), the market conditions in which it operates.

The above indicators are determined based on data contained in the company's financial statements, elaborated according to regulations issued by the Ministry of Public Finance or the authorities of other countries with similar competences. The category of financial performance contributes to establishing the category of classification of loans in the month following the one when respective reports are submitted to the bank. If banks are unable to assess the financial performance of a client, this client will be assigned directly in the category E.

Loans and investments are classified into the following categories: standard; under observation; substandard; questionable; loss. Classification of loans and investments is made by the simultaneous implementation of the following criteria, when possible: for *credit institutions*: debt service; financial performance; initiation of legal proceedings; for *non-banking financial institutions*: debt service; starting legal proceedings.

Table no.1 Classification criteria for loans granted to customers outside the credit institutions

		Financial Performance					
		A	B	C	D	E	
0–15 Days	Standard	Under observation	Substandard	Questionable	Loss	No legal procedure initiated	
	Loss	Loss	Loss	Loss	Loss		
16–30 Days	Under observation	Substandard	Questionable	Loss	Loss	No legal procedure initiated	
	Loss	Loss	Loss	Loss	Loss		
31–60 Days	Substandard	Questionable	Loss	Loss	Loss	Legal procedure initiated	
	Loss	Loss	Loss	Loss	Loss		
61–90 Days	Questionable	Loss	Loss	Loss	Loss	Legal procedure initiated	
	Loss	Loss	Loss	Loss	Loss		
min. 90 Days	Loss	Loss	Loss	Loss	Loss	Legal procedure initiated	
	Loss	Loss	Loss	Loss	Loss		

Source: www.wall-street.ro

As can be seen from Table no.1, according to recent regulations of the National Bank of Romania, credit institutions must include borrowers outside the credit institutions sector into financial performance categories, which are marked from A to E, in decreasing order according to quality. (Romanian National Bank Regulation No.3/19.03.2009, on classification of loans and deposits, and the establishment, adjustment and use of credit risk provisions, published in the Official Gazette No.200/03/30/2009)

Therefore, financial standing is focused more on the quantitative side of the entity, which is based solely on financial indicators. This standing has the goal of establishing a score, which classifies the economic entity in a particular *financial performance class* or a *class rating*.

Regarding rating, there is also the issue of the *country rating*, an index which estimates the ability and willingness of a country to repay external debt using foreign currency. Based on these understandings and other sources of information, we consider that *rating* is an evaluation process (assessment) of a system's status, evaluation after which the entity is granted a *mark* (number and/or letter(s) or a score). Hence, the classification of an entity in a *performance class* marked from "A" to "E", based on a *score*, is no more than the *rating* given to that entity.

4. Conclusions

Based on the above aspects, we can state the following.

- an economic entity's financial condition must be the main business target for every manager;
- the assessment of the financial condition can be done with the help of a system of linked financial and non-financial indicators, where the most important are the financial indicators;
- the creditworthiness of a company that involves accessing a loan from a credit institution is subject to banking regulations in Romania, customized at microeconomic level;
- determining the level of each financial indicator ultimately involves determining the financial standing and classification of the entity in a certain group of rating involves the design of a unitary pattern of aggregation of individual scores set for each financial ratio.

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APPROACHES REGARDING THE TAX EVASION IN ROMANIA

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In any economy, the main purpose of the tax system is to provide a solid and stable source of government revenue. On the other hand, a tax system should aim to enable the country's economic development and support disadvantaged groups. Achieving these objectives should be accompanied by a continuous preoccupation of the tax administration to increase its efficiency. In this process, a particularly important factor consists in reducing the tax evasion, given that it contributes to a diminution in terms of efficiency within the state structures, while being a factor of corruption. Over the past 20 years, in Romania, the presence of tax evasion has reached relatively large dimensions in both the economic area and the underground economy, where the phenomenon is widespread. Taking the road from the particular to the general, distinguishing the legal tax evasion from the fraudulent one, this paper aims to answer the question: Why is it necessary to control the tax evasion phenomenon and how to do this? This question aims at achieving the following objectives: distinguishing between the legal and the fraudulent tax evasion and the methods used by taxpayers to circumvent the tax obligations.

First of all, reaching the objectives was assured by consulting a significant amount of work, that is to say publications of scientific claim, while making use of analysis, induction and deduction, significant volume of quantitative information was examined and submitted to professional reasoning. In literature, there are many Romanian and foreign authors reporting on the tax evasion issue while as far as specialised magazines are concerned, there are just a few discussing about the social protection issues or about the European experience in the tax adjustment whereby the states have gone over the years, such as: the Romanian Economic Journal, the Annals of the American Academy of Political and Social Review of Social Innovation and other authors such as Saguna & Tutungiu (1995), M. Duverger (1965), Carmen Corduneanu (1998), Hoanță (2000). Research results and general conclusions on the issue of tax evasion in Romania are listed at the end of the paper.

Keywords : fiscality , tax evasion, blak labor, romanian taxpayer, the State

JEL Code: H26, K31, K36

1.Introduction:

Taxation has been and is still an objective necessity, despite being inappropriate for taxpayers. Holding backwards a millennial history, accompanying, in time, the birth and development of the state, the tax is one of the most controversial public institutions. Even though it was deemed to be established by the citizens' general consent, the taxpayers opposed the tax burden of the payment, through legal and less legal means in an effort to protect the most important part of their personal income. The literature offers a multiple of interpretations on the concept of tax evasion. One of them defines tax evasion as "all legal and illegal procedures whereby, all those interested peculate, in whole or in part, their taxable material obligations established under the tax laws." (Saguna & Tutungiu, 1995: 45). Another meaning of the concept of tax evasion was given by M. Duverger (1965:77), who considered that this phenomenon "refers to all manifestations of fleeing from tax" in this sense, tax evasion taking place when "the one who is supposed to pay the tax,

doesn't do it, without its obligation to be passed on to a third party." The tax evasion consists in the theft of taxpayers to pay their respective tax liabilities, partially or wholly, using legal loopholes or using clever maneuvers, in order to conceal taxable material. But regardless of how this phenomenon is defined, tax evasion is, ultimately, failure of the taxpayer to assume their tax liability.

The means of concealment employed for avoiding tax obligations can be divided in two categories: extrapolation of legislative failure or even the possibilities left by the legislature in certain illicit intentions and processes. In terms of how it can be accomplished, the relationship that exists between this phenomenon and the current legislation, tax evasion, there are two forms of manifestation: licit tax evasion (shelter built at law) and illegal tax evasion (fraudulent) or fraud tax. In terms of space, it can be identified the national tax evasion (tax lawful and unlawful tax) and the international tax evasion. (Hoanță, 2000: 52).

2. Research Methodology

The demarcation line between the unlawful tax avoidance and the lawful one is necessary and useful, because it gives the possibility, at least theoretically, to estimate the size of the phenomenon, in the two forms of manifestation.

Moreover, this distinction helps to sensitize policy makers and the administrative search and determine appropriate means to limit and control the phenomenon.

The licit tax evasion is the theft of a lawful part from the taxable matter, without this being considered offense or crime. It involves the exploitation of the existing regulatory framework in the sense of a smart capitalization of the inconsistencies, contradictions or equivocations of some legal proceedings in order to avoid legal obligations to the state. In some cases, the intentionality of action, coupled with the fact that it seeks to avoid paying tax obligations, leads to the conclusion that this form of tax evasion attracts the fault of the involved economic subject.

However, it is not the system of punishment that comes with the tax fraud, given that the accused one has not violated any laws, but basically took advantage of the existing legislation (or a lack thereof), "using a combination unforeseen by the legislature and, therefore, which was tolerated to escape from view." The "guilty" one of producing legal tax avoidance is therefore only the legislature. (Saguna & Tutungiu, 1995: 34). The frequency of this type of fraud is higher in the periods when new laws are introduced or changed and when the state uses intentionally tax incentives to promote policies towards certain socio-professional categories or in certain fields. In practice, lawful acts of tax evasion, based on a favourable interpretation of the law, are very diverse, depending on the inventiveness of the taxpayer and the largeness of the law. In Romania, tax evasion was done lawfully, being often based on tax incentives granted by government (rescheduling, postponement or exemption from taxes, increases and penalties relating thereto) and the omissions in the regulation of taxes and fees. Of course, this form of tax evasion can be avoided by correcting and improving the legal framework which has become possible, but often the existence of political, economic and social circumstances determines a tacit tolerance of evasion.

The fraudulent tax evasion (tax evasion) is a form of aggravated circumvention being studied, analyzed, and sanctioned by monetary and custodial measures, whenever it is discovered. This consists in a total or partial illegal concealment of taxable material with the purpose of eliminating or reducing the tax obligations which are incumbent on them. It was considered that this is a "cancer" that affects society and politics and, in some opinions, it would be about 25% of the budget of developed countries, reaching impressive percentages in emerging countries (Clocotici & Gheorghiu, 1996: 56).

This type of evasion is outlined in two forms: the traditional evasion (avoiding partial or total payment of tax obligations, or by completing and submitting incorrect documents, or by failure to

produce the required documents by applicable law, failure to produce employment contracts generate the black employment, declaring the minimum wage to a salary achieved much higher), legal evasion (hiding the true nature of an organism or a contract, although signed, the contract work is not declared at ITM), accounting evasion (creating the impression of accurate accounting records, using false documents in order to increase spending, reduce revenues, reduce taxable income and therefore tax liabilities due the state, per diem expenses, related to fuel the journey within the documents) and the evasion of the assessment (reducing the inventory value, increasing amortization and provisions in the overstatement of profits with the purpose of an increasing future profit). (Gliga, 2007: 45)

In relation to tax regulations, in the case of the taxpayers various tendencies and motivations are manifested in order to evade tax obligations. The extent to which tax evasion arrived in our country makes this phenomenon to be so real that its presence became daily in all lucrative spheres. It can be stated without exaggeration that in the period after 1989, a social norm of tax evasion was gradually but surely established, the Romanian taxpayer, regardless of his financial or social status, trying and succeeding, most of the time, to evade tax payment.

The proliferation of tax evasion in Romania was supported by a number of factors, including a tax law characterized by the presence of gaps, inconsistencies, vagueness and lack of stability over time as well as the late appearance of a law to combat tax evasion (Law no. 87 / 1994 came into force in the late 1994). Until 2004, there was no tax code or a tax procedural code which would have been essential to the tax legislation, as it has as purpose to limit the effect on tax evasion. At that time, there were too high incumbent taxes compared to the Romanian taxpayer's real capacity to pay, the revenue to GDP in 2008 being the lowest (32.8%) of all EU member countries in the context of an increasing corruption in society. In Romania, the most used tax fraud techniques established afterwards the carried out control actions, grouped by categories of tax duty are (Gliga, 2007: 48):

- **The income tax:** reducing the tax base by including expenses on cost categories without supporting documents or legal basis (fines, penalties, etc.) , the registration of oversized or over-permitted by law expenditure, the deduction of the shareholder's personal expenses or interest rates on loans from the companies of their employers, failure to record the total income, the transfer of the taxable income to the newly created company within the same group, in the period of their exemption from the tax payment, along with loss records by the parent company , calculating the tax on profit by the incorrect application of the law, no-calculation of the tax revenues from economic activities by certain nonprofit organizations, not recording differences or income tax obligations in the accounts established by the audit;

- **The value added tax:** the misapplication of the deduction system, not including certain operations which fall within the VAT tax base or not including all invoices in the tax base calculation, not highlighting and not transferring to state the VAT for the advances received from customers, failure to register as Payer once the minimum threshold was surpassed, the issuing of tax receipts and VAT invoices without the trader to be paying and without incurring and transferring VAT, "computation error", etc., are just some of the methods used to defraud the VAT;

- **The Wage tax:** tax exemption for all amounts paid to employees as wage income, not withholding and paying the taxes due on those wages on account of those workers employed on civil conventions or laborers, failure to pay the tax obligations on wages, non-compliance on the tax law, aggregation, tax exemptions and discounts, etc.

- **The Excise tax:** not including all taxable amounts in the tax base, reducing the tax base by undervaluation of imported goods, by using double customs documents, not calculating the excises for alcohol concentration changes, not including the excise tax in the sale price of the products which require excise, not highlighting the excise duty in accounting, avoiding excise

duty by changing the names of the products demanding excise and transferring them to a product category which doesn't owe excise taxes, having reduced rates (for mineral oils, alcohol, etc.).

- *Other taxes and fees owed to the state or local budgets*: highlighting in accounting, buildings at lower values than the actual ones, failure to submit declarations regarding heritage buildings, means of transport in possession and owned terrains or under management operators, declaring erroneous data, Failure in constituting and paying the dividend tax and its wrong calculation, individuals not declaring their incomes for various activities, etc.

3. Research results:

Table number1 shows the data published by the National Tax Administration Agency on fiscal discipline at the national level (in Romania) but also the attitude of the competent bodies in the discovery and punishment of fraudulent tax evasion, data concerning the number of checks and their results for the period 2003- 2009. It may be noted that although the number of checks performed by the control decreased during the period 2003-2009, the frequency of cases of tax evasion has increased. Of course, fewer checks lead to a lower probability for a taxpayer's evasion to be discovered and more than that, it doesn't have a positive impact on the degree of tax compliance of the romanian taxpayer.

Table number 1. The evolution of tax evasion in Romania over year 2003-2009

Nr. Crt.	Indicator	2003	2004	2005	2006	2007	2008	2009
1	Number of checks	446.822	273.020	286.903	259.032	278.623	282.764	276.544
2.	The number of identified cases of tax evasion	195.425	120.077	115.158	181.630	195.982	198.603	212.559
3.	The frequency of tax (%) (2/1*100)	43,70	44,00	40,10	70,01	70,33	70,23	76,86
4.	The total value of the identified tax evasion (thousands of Ron)	798.900	982.350	1.746.304	1.552.673	1.774.060	6.728.000	9.910.000
5.	The total number of applied penalties (thousands of Ron)	1.804.700	1.984.522	1.137.326	1.044.421	1.257.745	1.036.000	2.418.000
6.	The additional drawn amount of money (thousands of RON) (4+5)	2.603.600	2.966.872	2.883.630	2.597.094	3.031.805	7.764.000	12.328.000

Source: National Tax Administration Agency, and the author's own calculations

As far as Cluj County is concerned, the table number 2 and table number 3 are displayed below in accordance with the ITM Cluj activity reports for the 2007-2010. It is noted that since 2009, both the number of employers, including the contracts during the year and the number of employees have decreased. This leads, of course, to a decrease in the number of employers found to be practicing undeclared income, along with an increase number of people identified as working illegally. Analyzing national campaign for detecting and combating undeclared work in Cluj County, in various fields, there is an identification of a large number of unauthorized workers in the construction industry. Based on statistics, national campaigns in certain sectors, which didn't use black labor, did not even refer to this area in the coming years.

Table number 2 . The evolution of black labor in Cluj County

Nr. Crt.	Criteria	2007	2008	2009	2010
		years			
1	Number of verified employers	3.200	3.066	3.509	2.504
2	Number of employers discovered to practice black labor	523	567	551	176
3	Number of employees discovered to practice black labor	1.430	1.212	1.891	576
4	Applied penalties (thousands of lei)	2.126	1.788	1.929	1.112
5	Number of employers existent in records at the end of the year	22.840	23.517	21.485	19.690
6	Number of contracts recorded during the year	106.113	104.011	69.011	53.701
7	Number of contracts active at the end of the year	152.106	156.506	136.278	129.304

Source: A representation belonging to the authors and which was made in accordance with the ITM Cluj activity reports, 2007-2010

Table number 3. Black labor as a result of the national campaign to identify and combat illegal work in Cluj County

Nr. Crt.	Fields identified	2007	2008	2009	2010
		years			
		Number of units	Number of employees		
1	Car wash	NO	2.229	1940	NO
2	Constructions	3.791	60.117	136.278	1.129
3	Forestry, logging, wood processing	NO	66	1.629	NO
4	Mountain units	NO	NO	45	NO
5	Milling and baking	1.420	-	NO	NO
6	Textiles	22	-	NO	22
7	Manufacture of alcohol	NO	-	NO	NO
8	Ensuring a decent and healthy work environment	NO	57	NO	11
9	Commerce	NO	NO	NO	-

Source: A representation belonging to the authors and which was made in accordance with the ITM Cluj activity reports, 2007-2010

Conclusions:

Tax evasion is not a phenomenon specific only to Romania, or to countries with emerging market economies. The phenomenon is as old as the very existence of tax itself is.

The tax evasion doesn't fit into time or space boundaries. However, the extent of this phenomenon represents significant differences from one country to another, generally considering that in countries with unstable and dysfunctional economies, where corruption is manifested in full economy and tax evasion are "at home".

Tax evasion has consequences, primarily at the macroeconomic level, consisting in state's deprivation of income and thereby the opportunities for maneuver are decreased in both the economic and social fields.

On the other hand, entities that avoid paying taxes, having lower costs, will compete unfairly with those who meet their tax obligations and the first ones will distort the smooth operation of free market mechanisms, undermining some industries. Accepting and generalizing this phenomenon would undoubtedly lead to the suppression of the state.

Despite this, in modern times, this is impossible, given the fact that the private initiative was never able to provide social and economic balance to a nation. Now, more than ever, it is universally acknowledge that, during the global economic crisis, the market economy is not a business model to ensure continuous prosperity to those who adopt it.

In conclusion, tax evasion is equal to a "cancer" and it affects the civil and political society which would be around 25% of the budget of a developed country, reaching an impressive percentage in developing countries. Hence, the state must maintain a fair level of taxation in order to keep away the tax evasion phenomenon and to provide diversified and sufficiently severe penalties, fighting for this cause.

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A BEHAVIORAL APPROACH TO THE GLOBAL FINANCIAL CRISIS

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The purpose of this paper is to reflect the behavioral biases that led to this global financial crisis. The paper presents briefly the real causes of the crisis (structural and cyclical factors) and puts a greater accent on the behavioral factors. The authors considered to structure the paper in three main pillars: behavioral factors, the collapse of ethical behavior and the role of behavioral finance in studying, regulating and assessment financial risks. The first pillar consists in a brief presentation of the behavioral factors such as: optimism and wishful thinking, overconfidence, greed, regret, pessimism, passing the responsibility, herding - groupthink, anchoring, representativeness biases, informational cascades and “this time is different” syndrome. The second pillar of the paper presents the collapse of ethical behavior that led to the global financial crisis: predatory lending practices, inappropriate compensation schemes, rating agencies behavior, corporate governance reforms and financial institutions opacity in their reporting. The third pillar presents the mismanagement of risk and regulations that led us into this global mess. The paper concludes with the need of integrating biases of human behavior into regulations in order to make them more effective and people become less financially vulnerable.

Keywords: Behavioral finance, regulation, crisis, biases, ethics

Jel Classification: D23, D82, G01, G15, G20, G28

Many reputed professors in economics like Robert Shiller (“Irrational Exuberance”), Nouriel Roubini, Stephen Roach (Morgan Stanley) and analysts from the Bank of International Settlements have been feted for foreseeing the global financial crisis (*Karabell, 2009*), but none of them could see the exact form that it would take and the timing of its onset and ferocity. The risk of the system as a whole rather than of any specific asset or institution has been mismanaged for more than a decade, being precisely the reason for all the imbalances in the global economy and the subsequent global financial meltdown. Individual risks have been small and often properly managed but the risk to the system as a whole was huge and nobody took serious care of, causing global interconnected imbalances that no single authority could manage.

Asset bubbles and financial crises are not new to mankind. Even if risk managers tend to call them “six sigma events” or events that happen a couple of times in a hundred years, actually they happen more frequent. The first asset bubble and burst happened in 1636-1637 (the Dutch tulip mania) and many further examples can be given: the crisis of 1825, 1873, 1890 (Baring Crisis), the panic of 1907, which started in the US after the stock market fell close to 40% from its peak (*Kamalodin, 2011*), the Great Depression (1930s), the Latin American debt crisis (beginning in 1982), the Stock Market Crash (1987), the crisis after the Technology bubble in 2000, the Nordic Financial Crisis (1990s), the European currency crisis (George Soros’s speculations against the sterling pound), the Tequila effect (the massive devaluation of Mexican Peso, leading to a bank crisis), the Asian Flu in the second half of the 1990s, the Brazilian fever and the Russian Cold causing LTCM to fill for bankruptcy, endangering the US financial system (1998). Flash Crash is another “six sigma event” and refers to the US stock market crash on May 6, 2010, in which the

DJIA plunged about 900 points (about 9 percents) only to recover those losses within minutes. It was the second largest point swing, 1010,14 points and the biggest one day point decline, 998.5 points, on an intraday basis in DJIA history (Wikipedia). The only **common denominator** of all those events is **human behavior**. Studying the crisis from a behavioral perspective, allows us to understand how human psychology (so called “**animal spirits**” by Keynes) drives the financial actors’ decisions and the human behavior impact on economics and financial markets. When anxiety, emotional pain and behavioral biases interfere in the judgments and decisions about risk and reward, the success can be systematically compromised. A behavioral approach in studying the “animal spirits” that led to the current global crisis, might lead us to understand what must be changed in society, in economic thinking, in principles, in the approach to economic events in order to avoid similar scenarios in the future (*Florescu, 2009*). We have to learn lessons from the past crises but the solutions applied successfully then might not resolve the problems from now.

According to Daniel Daianu (2008) the roots of the current crisis might be found at both macro and micro level, classifying them in **structural and cyclical factors**: *Structural factors*: the increasing role and the complexity of financial markets in the financial intermediation, securitization that spread the risk across national borders due to globalization, making markets less understandable (opaque), inadequate risk and econometric models, conflict of interests among market participants (CEOs, independent directors, financial institutions vs. customers, rating agencies), intensive run for short term profits (promoting greed and hubris) without regarding the long-term goals (inadequate compensation schemes), imbalances in saving and spending of a number of countries and not last, the over reliance on the self-regulatory virtues of markets. Among *cyclical factors* might be the excessively low risk free interest rates in major economies promoted by authorities in order to avoid a deflationary bust after September 11. Through easy money policies, it has been made easier than ever the use of high leverage in all sectors, including household sector through sub-prime mortgages, corporate sector and thus the financial system as a whole.

The increase in leverage at a systemic level through financial innovations, introduced fragility into the system without noticing for a long time. The acerb competition among financial institutions and the continuous run for high yields, made them to lose lending standards and increase the use of credit derivatives. Due to the complexity in the design of financial innovations, the accounting and reporting standards used for more than several decades, could not reflect and integrate the whole embedded contingent liabilities, leading to opacity and making very difficult to value them especially in moments of increasing uncertainty in the financial markets.

From a **behavioral point of view**, the behavioral factors of the global financial crisis might be multiples. There are so many behavioral biases involved in the investment decision process leading to crisis, that we could write a book about them. Unfortunately we will have to resume to a brief presentation. The main **behavioral factors** met are:

- *Optimism / wishful thinking*: household sector, corporate and the financial sector have increased the use of leverage, underestimating the fragilities and the imbalances that might appear. They all had the illusion that interest rates will remain for a prolonged period at very low levels; there will be liquidity available for all, causing the so called “Irrational Exuberance” (Shiller) necessary for the asset bubbles. The optimism caused even predatory lending practices and the collapse of ethical behavior, in the permanent search for higher yields. They all underestimated the risk of costs while overestimating gains.
- *Greed and over indebtedness*: the mentality of people: “Get rich or die trying” or “Buy now, pay later”.
- *Regret*: manifested after the asset bubble burst, when panic conditions installed and everyone wanted to have a ticket for the so called “flight to quality” program. No one

wanted to admit from the beginning that he was probably wrong – despite evidence, so they wanted for confirmation data (confirmation bias) until the panic and pessimism burst.

- *Herding behavior and Group thinking*: individuals tend to mimic other people's gestures and decisions. During the dot.com bubble they all wanted to have a slice of the grubstake, and when the bubble busted, they wanted to get out all together, if possible in the same time. There is so called "social pressure to conform" with the crowd, even among professionals and financial markets analysts (reputational risk). Herding tends to reduce regret, because mimicking others behavior, makes you feel more comfortable that you did not perform worse than your peers (*Muradoglu, 2010*). Herding amplifies economic and credit cycle effect, as decisions become more uniform (*Rizzi, 2009*). Before 2007 almost nobody doubt about risk models, now it's a real fashion among researches to doubt risk management practices.
- *Informational cascades*: "It's more likely that I'm wrong than that all those other people are wrong. Therefore, I will do as they do." (Wikipedia)
- *Pessimism*: the downturn came when investors adjusted simultaneously their positions triggering a decline in asset prices (*Rizzi, 2009*). October 2008, was probably the moment when the level of irrational pessimism was the highest in a generation (*Martin, 2008*).
- *Overconfidence*: risk managers and investors had the illusion of control by using quantitative risk models; but they did not understand their limitations (Nassim Taleb)
- *Passing the responsibility*: Risk managers used to internalize success while externalizing failures. They attributed success to their skills of predicting the markets, managing individual risks, while passing the responsibility on FED, SEC, speculators, or any other authority, but not ever recognizing that it was only, and absolute only their fault for not taking cautionary measures, not having a contingency plan.
- *Anchoring*: people anchored their expectations based on past data (years of euphoria)
- *Familiarity biases*: many actors had the illusion that they knew what they were doing. Even Greenspan (2008) finally admitted that he was "partially" wrong.
- *Representativeness biases*: people tend to see patterns where they are not, based on stereotypes. Trading financial markets is not a science but an art, that's precisely why you cannot ever rely on past events and statistics in order to predict the risks of the future. People assumed to continue the "easy money" policies for an indefinite term and the housing prices market would not decline as a whole.
- *"This time is different" syndrome*: people were convinced that housing prices would continuously increase and the stock markets overall will get higher and higher.

The collapse of ethical behavior of many actors in the financial markets was probably the most important factor that endangered the viability of the financial system as a whole. If twenty years ago, people obtained their mortgages from their local bank officer, having a close relationship with him for years, nowadays, people obtain their mortgages from agents that come "out of the blue" convincing to finance / refinance their home just like an ordinary car assurance. The agents were paid exclusively on quantity ("*How many mortgages did you bring me today?*") not quality ("*How many good mortgages you bring me today?*") (*Greycourt White Paper*). Agents struggled for selling as many mortgages so they could afford the comfortable living they needed, without ever taking in considerations the risk of default for the contracts signed – "*I have to close thirty loans a month, because that's what my family's lifestyle demands*". The atmosphere among agents „*was like this giant cocaine party you see on TV*" - „*It was like this giant rush of urgency.*" – according to Sylvia Vega Sutfin, an ex account executive at BNC Mortgages. Agents recurred even in falsifying documents and lying people about the real cost of the mortgages: "*Every closing that we had really was a bait and switch*", „*'Cause you could never get them to the table*

if you were honest." Some of them were very creative in falsifying documents: „*They used scissors, tape, Wite-Out, and a photocopier to fabricate W-2s, the tax forms that indicate how much a wage earner makes each year. It was easy: Paste the name of a low-earning borrower onto a W-2 belonging to a higher-earning borrower and, like magic, a bad loan prospect suddenly looked much better.*” (Hudson, 2010). Nobody cared about those practices, because nobody ever thought of carrying the paper on their own balance sheets. Once a mortgage was signed and approved, the agent got paid and would never see again the borrower again. The lenders (Mortgage companies) soon afterwards sold them all further to investment companies that securitized them in a pool, and got also the papers off the balance sheet by selling as an innovative financial product to other investors from all over the world. Lending money and underwriting standards declined since it was in no one’s interest to hold the loans in their books, but concentrate on volume and pass the risk to greedy and naive institutional investors. The lenders made lobby among politicians, lawmakers and other influential figures (the so called „Friends of Angelo” (FOA) VIP Loans program that offered below market terms on mortgages for affluent people) (Darrell, 2009) to attract the support of authorities for the subprime market. Their argument for support was making the American Dream come true and making houses affordable for every citizen. Attracting Government Sponsored Entities like Fannie Mae and Freddie Mac into this business, made possible that risk to be „nationalized” and profits „privatized”. Practically, the risks were passed to them, because they were the entities among other greedy private investors that hold billions of dollars worth of these mortgages on their balance sheets.

Rating agencies were the one who should have protected investors from buying risky financial products, but probably they did not understand the risk very well, either. Probably the rating agencies did not have enough information about the „content of the packages”. Even the brightest minds and quants of Wall Street, nor regulators did not fully understand what was happening in the markets. Some voices argue that the rating agencies should have foreseen the high default rates for subprime borrowers, and they should have given these CDOs much lower ratings than the 'AAA' rating given to the higher quality tranches. If the ratings had been more accurate, fewer investors would have bought into these securities, and the losses may not have been as bad (Petroff – Investopedia). How could they do that, knowing that they receive fees from the security’s creator, how could they maintained their objectivity when running the risk of the underwriter going to a different rating agency that would sell their ratings for a higher bidder?

More ethical failures can be seen among the bonuses that many top executives received even if those „performances” were because of taking too much risk, endangering their companies and causing the global financial meltdown we are passing through. All the compensation schemes, profits, glory and keeping the job measures made people have the will of taking more and more risk, even if they half suspected that it would end badly. Shorting the securities you are selling to your clients cannot be called ethical job, but it’s legal (Greycourt, 2008). That’s precisely what Goldman Sachs did and proudly said it in the 3rd quarter of 2007 Report („*Significant losses on non-prime loans and securities were more than offset by gains on short mortgage positions*”). Customers and investors of the so called „innovative products” were abandoned when they need to convert them in cash, besides of the fact that previous buying them they were assured (banks ensured that the auctions would not fail) of being „*Safe as cash but with a higher yield!*” (Greycourt, 2008). The main problems with banks were that they assumed risks and role that should not have had. Commercial banks are not investment funds, nor hedge fund to take risks, are leverage of more than 25-30 times their equity. Banks have a different role in the financial system. There is more than an ethical issue here, is a behavioral matter: group thinking and herding. Chuck Prince (ex-CEO of Citi) once said: „*When the music plays you have to dance*”. No one would listen to risk managers in good times. Corporate governance reforms

stimulate instituting independent directors or non-executive board members, committees composed of independent directors. They are supposed to induce more rationality, ethics in corporate governance and a fostering debate of flawed exposures policies before they become lethal – render corporate disasters rarer. Morck (2007) say that corporate officers and directors are more loyal to their direct boss (CEO) than to their shareholders and to the law (Enron, WorldCom, Hollinger, AIG), even under clear signs of impending financial doom. Behavioral factors, such as cognitive dissonance, reciprocal favor trading or group conformity may significantly weaken the independence and the authority of directors. According to Higgs Report (2003), almost half the so-called independent directors on British boards were recruited by the CEO through personal contacts or friendships. There is no wonder why we have got into this mess.

Financial markets have been understood based on conventional assumptions of rationality, profit maximization and being informational efficient (EMH), using complex econometric models. Standard models are being put in doubt because they do not take in account the whole picture, especially the behavioral aspects of the markets. As human beings, we have the tendency to make mistakes, to have biases and interpret differently the information available, depending on our own state of mind. People cannot be called rational agents, but „animal spirits”, just like Keynes said. David Tuckett (2009) finds the reason why so many people rely on economic and finance modeling, without questioning too much about their validity: the comfort value of mapping the future. The complex calculus, tables, statistics, charts and many sophisticated and less intelligible information, *„manage anxiety and to create the impression that risk is being managed. Such stories disguise the fact that in many ways we have not come very far from the casino.”* But uncertainty and risks cannot be managed without taking in consideration the emotional part of the decision making process: imagination, desire, behavioral biases like herding, confirmation and many heuristics that provoke anticipated financial consequences depending on the context - *„...financial markets will always tend to be subject to greed, over-excitement, anxiety and panic and divided states of mind”*. (D. Tuckett). Probably the world’s most prolific skeptic about risk models is Nassim Nicholas Taleb. *„Taleb says that Wall Street risk models, no matter how mathematically sophisticated, are bogus; ... risk models have done far more harm than good. And the essential reason for this is that the greatest risks are never the ones you can see and measure, but the ones you can’t see and therefore can never measure. The ones that seem so far outside the boundary of normal probability that you can’t imagine they could happen in your lifetime — even though, of course, they do happen, more often than you care to realize (Nocera, 2009)”*. Taleb detests the original VaR - portfolio risk management tool, because it is based on the past two decades of euphoria data when predicting the risk. Taleb is more concern of the risk that models do not take in consideration, the 1% case event, the so called „six sigma events”, „fat tails” or „black swans”. According to him, *„Any system susceptible to a black swan will eventually blow up.”* David Einhorn, the founder of Greenlight Capital hedge fund, affirmed the useless of VaR as a risk management tool, because *„its use creates a false sense of security among senior managers and watchdogs. This is like an airbag that works all the time, except when you have a car accident.”* (Brown, 2008). Goldman Sachs realized the limits of VaR and the potential loss that might arise from a subprime market meltdown and decided to „get closer to home” – reducing the overall exposure to the residential housing market: *„We proceeded to sell certain positions outright and hedge our long positions in an attempt to achieve this result”* (Testimony) though it lost money on residential mortgage products in 2008 (Harper, 2010). Our personal belief is that you cannot blame equations for being wrong. As Nocera stress it: *„The math alone was never going to be enough”*. You know the principle „garbage in, garbage out” - the most important thing is the data input in the models. As long as the data will include behavioral aspects of the markets (the equations / indicators will be adjusted to the moods of the markets), the models

would do a good work. No one of us is perfect so we couldn't blame models for not being perfect. Humans are error-prone. As a trader, as an investor, as a risk taker or manager you have to always consider the human condition. What matters most in trading is how much money you lose when you are wrong and how much you win when you are right. Nobody is right all the time. Nobody could be consistently Mr. „Know it all”. LTCM considered knowing it all and you all know the story -, „*There are two kinds of people who lose money: those who know nothing and those who know everything*”. *With two Nobel prize winners in the House, Long Term Capital clearly fits the second case*” (Robert Lenzner).

The lack of financial institutions and regulatory oversight over the risk – creating behaviour of mortgage lenders and repackages (Grosse, 2010), over the valuations that were assigned to make this mess happen. Neither securitization, nor complex derivatives instruments should be prohibited, but there is a clear need of improvement in regulation. As Jesse Livermore puts it, „*Wall Street never changes, the pockets change, the suckers change, the stocks change, but Wall Street never changes, because human nature never changes*” – the solution might be regulating greed and speculation. There is need for integrating greed and all the biases of human behavior into regulations, to make it more effective. Even Alan Greenspan, former FED chief and a vehement opposer of regulation, admitted he was „partially” wrong to resist regulation of derivatives – „*Partially, ...I made a mistake in presuming that the self-interests of organizations, specifically banks and others, were such that they were best capable of protecting their own shareholders and their equity in the firms*” (Clark & Treanor, 2008)

As a **conclusion**, we think that an external constraint is needed when the market alone cannot optimize social welfare because of its imperfections, inefficiencies and participants' psychological characteristics, such as: greed, hubris, jealousy, fear, ignorance, group thinking, herd behaviour, incomplete information and lack of knowledge. Once we form a profound understanding of our own psyche, we should be able to manage better the impending crises.

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THE VALUE ADDED TAX AND THE EVASION CHAIN OF INTRA-COMMUNITARIAN VAT

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The relationship IRS – taxpayer runs the risk of turning into a psychological war in which, however, given the positions held, the IRS is by far on a favorable footing. Between the apparently excessively formal position held by the IRS, which seems to conceal behind the laws, and the sometimes forced interpretation of the laws, by the taxpayer, there are the courts of law, also disturbed by the legislative changes which appear to have entered a perpetual motion.

The objective of the fiscal administration regarding the value added tax is to combat tax evasion and fraud. It is very important to combat evasion in the VAT field because it represents the indirect tax of the largest share in the consolidated general budget. VAT evasion represents the intention of not paying the tax, withholding or not declaring it, or requesting its refund which would not be fit, due to the exaggeration of the deductible amount of the VAT. The essential aim of the IRS inspector is to verify the correctness of the declared amount of the value added tax. It should also be observed whether the incorrectness is deliberate or whether it was due to misunderstanding, carelessness or the ignorance of the payer. In all cases judgment is necessary, as for the cases of negligence the amount to be paid must be corrected and accompanied by applying fines and / or penalties, and in the cases of intended fraud legal actions are to be applied in order to obtain a conviction. Deceitful deductions represent other methods for tax evasion and are undertaken based on fake invoices, invoices often used several times for deduction, or invoices related to purchases that have never been made. Thus there are examples of economic agents who have practiced the right to deduct the VAT due to the acquisition of goods which consisted in the property of other economic agents. In other cases noticed was the deduction of VAT on goods or services that were not included in the activities of the economic agent who purchased them. Registration errors seem innocent, but they occur frequently and have a high value; for example, some economic agents do not calculate the Value Added Tax at the receipt of advanced payments from customers but when the goods are delivered.

Keywords Value added tax, intra-communitarian acquisitions, IRS inspector, deduction, taxpayer

JEL Classification G2, H2, H3

I. Introduction

The value added tax represents the revenue of the state budget, included in the category of indirect taxes, which apply to the operations regarding delivery of tangible assets, transfer of property regarding fixed assets, the import of goods, supply of services, as well as the corresponding operations.

The tax becomes applicable when the legal conditions are set, necessary for the retention of the tax.

The value added tax becomes payable when the IRS becomes legally entitled, at a certain time, to require payment by the persons liable for tax payment, even if the payment may be delayed. The action becomes applicable usually on the date the goods or services are supplied, unless otherwise provided by law.

For imported goods subject to customs duties, agricultural duties and other similar communitarian charges, established as a result of a common policy, the VAT becomes applicable when noticed and the respective communitarian taxes are due.

If imported goods are not subject to communitarian taxes previously foreseen, the VAT would become applicable when due if imported goods were subject to such taxes.

If, when imported, the goods are subject to a special customs regime, the tax becomes applicable on the date these cease to be subject to such a regime.

The tax becomes applicable on the date the goods or services are delivered, in accordance with the exceptions provided in the Fiscal Code of Romania, namely:

- on the date when the invoice is issued, before the date when the tax becomes applicable;
- on the date the deposit is cashed, for advance payments made prior to the date when the tax becomes applicable. Exempted from these provisions are deposits cashed for the payment of import and the VAT for import, as well as any advance payments made for operations exempted from tax payment or not subject to be taxed. The advance payments are considered to be the partial or full payment of the value of goods and services, performed before the supply thereof;
- on the date of cash withdrawal, for supplies of goods or services, performed by automatic vending machines, gaming or other similar machines.

In the case of an *intra-communitarian acquisition* of goods, the tax becomes applicable on the due date for applying tax on the delivery of similar goods, in the Member State where the acquisition is performed, and the tax becomes applicable on the date the invoice is issued to the person performing the acquisition, taking into consideration the entire value of the goods supplied, but not later than the fifteenth day of the month following the month in which the tax became applicable.

The taxable amount for the import of goods is made up of the goods' value at customs, determined in accordance with the customs legislation in force, plus any taxes, fees and other charges due abroad, as well as those due following the imports to Romania, except for value added tax to be levied.

The taxable amount includes incidental expenses such as commissions and packing costs, insurance costs, transportation costs, incurred up to the first destination of goods in Romania, if these expenses were not included in the taxable amount. The first destination point for the goods is considered the destination indicated in the transportation document or any other document accompanying the goods, when they when these enter Romania, or, in the absence of such documents, the first place for unloading the goods in Romania will be considered.

The taxable amount for the import of goods does not include the following:

- Rebates, discounts and other price decreases granted by suppliers directly to customers on the day the tax is due;
- Amounts representing damages, determined by final and irrevocable court decisions, penalties and other amounts requested for the total or partial failure regarding the fulfillment of contractual obligations, in case these are set as additional to prices and / or rates which have already been negotiated on and established. Any amounts which, in fact, represent the value of goods delivered or services rendered, are not to be excluded from the taxable amount;
- Interests received after the delivery date, for late payments;

- The value of packaging and encasing exchanged between suppliers and customers, with no billing.

For the intra-communitarian acquisitions of goods the taxable amount is determined based on the same elements used to determine the taxable amount for the delivery of the same goods within the country.

If the elements used to determine the taxable amount for an import of goods are related to in foreign currency, the exchange rate is determined according to the communitarian provisions governing the calculation of value at customs.

When the elements used to determine the value at customs are set in a currency other than the national one the exchange into lei of the value at customs is to be performed according to the exchange rate recorded in the last but one Wednesday of the respective month and published on that same day. The exchange rate recorded during the last but one Wednesday of the month is used during the next month if it not replaced by an exchange rate determined according to Art.72 of the tax code. If the exchange rate is not registered on the last but one Wednesday or, if it is registered but it has not been published on that certain day, the exchange rate which was last recorded and published in the previous 14 days is to be considered the official exchange rate and registered for that respective Wednesday .

If the exchange rate recorded on the last Wednesday of the month and published on that particular day differs by 5% or over the exchange rate set according to Art. 71 to enter into force next month, the exchange rate replaces the latter one starting with the first Wednesday of the respective month. If within a certain period of application, the exchange rate registered on a Wednesday and announced on that same day differs by 5% or more compared to the rate referred to in this chapter, it is to replace the latter one and enter into force the following Wednesday. The replacing exchange rate remains in effect for the rperiod of time left of the current month, if it is not to be replaced.

If the customs authority accepts, at the request of the declarant, to provide or submit later on some details regarding the declaration on the free circulation of goods, in the form of a global statement, either periodic or reawarding, the use of a single rate may be set for the exchange into lei of the regarded elements used to determine the value at customs, given the case when they appear in currencies other than the national one. In this case, the rate used is the one which is valid on the first day of the period covered by the respective customs declaration.

If the elements used to determine the taxable base of a transaction, other than the import of goods, are set in foreign currency, the exchange rate to be applied would be the most recent exchange rate announced by the National Bank of Romania or the exchange rate related to by the bank hosting the settlements, according to the date by which the taxing of the transaction in question is to be performed and due.

II. The evasion chain of the intra-communitarian VAT

According to our opinion there is a clear split between the economic and the legal background relating to the deductibility of VAT and its form, a break which should be resolved by allotting priority to the form over the essence.

The stake of the issue in question is all the greater as the data missing from the justificative documents appear to deprive them of legal effects, so that together with the non-deductibility of VAT, there may also occur issues related to the non-deductibility of expenditure related to the calculation of the tax on profit *“non-deductible expenses registered in the bookkeeping, which are not based on a justificative document according to the law”*.

We believe that this manner of settlement is the source of conflict between the IRS and taxpayers in what concerns the VAT deductibility issue, and consequently the deductibility of expenses related to the tax on profit.

Questioning a rational solution based on the economic reality, we have to consider, in fact, issues related to the IRS power to ascertain facts or to assess the impact of the lack of some information which should be included in the justificative documents.

If we refer only to the minimal content of the documents, we may note that the legislator himself is not constant in this direction, as even some justificative documents signed the legislator do not meet minimum content requirements. For example, the VAT paid at customs is justified on the basis of a customs declaration or a document issued by the customs authority (regularization decision), documents which contain the essential data regarding the transaction (the contracting parties, the taxable amount, the tax value, etc.), but do not contain other elements such as the tax regime applied by the vendor.

As we already mentioned, we fully agree that these documents contain relevant data and, moreover, are validated by the customs authority.

Consequently, the lack of evidence precludes the strict interpretation and enforcement of tax provisions, and in the opposite direction, their certification by the customs authority confirms the effectiveness of the payment which is subsequently required to be refunded (deductible), thus making the double taxation impossible.

The inadequacies among legal provisions can be outlined in other areas. Thus, if the Tax Code establishes a priori by its content the quality of justificative document for the documents supporting the underlying transactions, the Law of Accounting confers that particular status only after the document was entered in the bookkeeping (Article 6: *Any undergone economic-financial transaction is recorded at the time of its development by a document underlying the accounting records thus acquiring the quality of justificative documentation*).

We do not want to allow priority to either of the two regulations, but we must point out that the “tax status” of a society is based, as a starting point, on the “bookkeeping status” (the tax control itself based on the bookkeeping status, on information resulted from the bookkeeping).

In this regard, a striking example is the purchase of fuel; this is because the tax receipts issued by the cash register do not contain all the elements required as mandatory for justifying the deduction right, moreover in the case of the receipts due to purchases from individuals.

Their registration in accounting (proof of entry of goods into inventory, according to sect. A para. 2 of methodological rules of OMFP. 1.850/2004) confers these registrations the status of documentary evidence, according to the Law of Accounting.

It is more than obvious that the presence of these non-unitary provisions led to an inconsistent practice of the IRS – and of the courts - which has always swung between the core of the problem and its shape.

III. Conclusions

We may note that the activity of both the IRS and the law courts (especially the high-rank ones) has steadily pursued the formal application of the laws, without applying the assessment capacity which they were provided with by law.

The justification of such behavior is even more incomprehensible in the case of the law courts, particularly in the case of the High Court of Cassation and Justice, which, as we have noticed, does not apply a minimal consideration of the violation of neutrality and the avoidance of double taxation those situations where the evidence fully demonstrates compliance with the basic conditions of the deduction.

The effects of such practices transcend from the VAT towards the tax on profit, so that, if the conditioned period of time the taxpayers are able to regulate the deductible tax through the VAT deduction, this is no longer possible in the case of tax on profit.

On the other hand, the invoice - if we refer only to this justificative document - along with the start of contract execution, in terms of commercial and civil regulations would replace the lack of

a written contract. Per a contrario (when something is stated and the contrary is denied), except for the cases expressly prohibited by law (e.g. real estate sale), the invoice may be regarded as the contract between the parties. On hand such a practice, both tax authorities and the courts do nothing but disassociate the justificative value of the invoice as supporting evidence regarding the authenticity of the analyzed commercial transaction.

Specifically, we find that the invoice may replace the justificative document to collect VAT (the VAT rejected at repayment becomes collected tax with the related obligation to pay) or for including in the accounts of a non-deductible expense, but can not justify the right to deduct both of deductible VAT and the expense involved.

In fact we talked about tax neutrality and the avoidance of double taxation and the result would be the following: *the tax authorities may calculate taxes using the documents (even fictional ones, as we noted in the previous examples) which do not act as supporting documents, these not having the same value when it comes to the return of sums the taxpayers are deprived of as a result of applying implicit sanction due to lack of observance regarding formal requirements.*

Such an activity is even more serious if the missing elements of the documents that do not meet the formal requirements of the law refer to the beneficiary (the person audited by IRS). These shortcomings, in the presence of fair practice, should be allowed to be supplemented even during the inspection.

We must not forget that the probative value of commercial bills is complemented by other evidence, which together show the state of fact of the controlled transactions.

For example, O.M.E.F. no. 2.421/2007 states that justification of exempted actions with possibility of deduction will be based on the documents presented in the Instructions included in the Annex to the Order. One such example is the justification for the exemption with deductibility in the case of intra-communitarian supplies, based on the following documents:

- The invoice must contain the information referred to in art.155 par. (5) of the Tax Code, as amended and supplemented, and must also include the registration code for VAT purposes assigned for the buyer in another Member State;
- The document certifying that the goods were transported from Romania to another Member State;
- And, where appropriate, any other documents, such as: contract / order of sale / purchase, insurance documents.

Another example is the tax norm by which taxpayers are required that they should declare twice a year to the tax authorities all domestic deliveries and acquisitions by submitting the procurement no. 394, with the possibility of a cross-check from the IRS. Such a cross-check can be done even at European level through the VIES and INTRASTAT statements so that, by reasonable efforts, the IRS may lead to those transactions which are not covered by the right of deduction.

Without insisting on such additional evidence, we consider that in what VAT is concerned there is an aggregate mechanism for tracking the actions undertaken through the documents which have to be submitted by the taxpayers (log of sales / purchases, the VAT deduction).

Actually, the discussion on justificatory documentation and their completion with other data results finally in ascertaining whether tax authorities do or do not have a say in determining the tax status quo.

A first piece of legislation that gives the IRS such a right is exactly art.11, para. (1) of the Tax Code, according to which “in determining the amount of tax or fee (...) tax authorities may not consider a transaction that has no economic purpose or may recommit the form of a transaction to reflect the economic substance of the transaction”.

In addition to recognizing a right to assess the tax status of the analyzed transactions, in terms of this provision in the Tax Code, the doctrine reveals that the legislator has indicated the

framework, even within the Code, of the principle regarding the prevalence of the economic character over the legal one.

The right of assessment is accompanied also by the correlative obligation which is stated in Art. 6 of the Tax Procedure Code (Ordinance no. 92/2003) according to which the tax authority is directed towards assessment, within its powers and duties, of the *relevance of tax status and towards adopting the solution according to the law, based on the complete findings on all the clear circumstances involved*.

In addition, Art.7 para. (3) of the same legal document provides that “the fiscal authority is required to examine the facts objectively, as well as to advise taxpayers on filing of returns and other documents, in order to correct statements and documents, whenever appropriate”.

In conclusion, we believe that tax control authorities can and must take into account all those factors which may lead to the proper settling of a state of fact, and if the lack of an item in a document can be complemented by other relevant evidence and by a reasonable effort, the refusal to recognize the right of deduction can be interpreted as a breach of legal obligations.

The prevalence of substance over form regarding the communitarian performance, resulted also from the Decision V/2007 of the High Court of Cassation and Justice, is clearly in contradiction with European law and practice, so it is difficult to understand its content, given that, when issued, Romania was already an EU Member State, so the Decisions of the European Court of Justice were binding.

Moreover, we note that since the date of accession, the Tax Code has been amended, and that regarding the VAT deductibility no significant changes were made in order to adjust to the communitarian court decisions.

Using the principle of fiscal neutrality, the European Court of Justice ascertains in its decisions that, in applying the common system of VAT on transactions of goods and services, the tax is proportional to the price of goods and services, regardless of the number of transactions that occur before the stage when the tax is definitely collected. Basically, it can be ascertained that the collected tax varies depending on the applicable share and on the value of goods and services traded.

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DETERMINATION OF RESIDUAL VALUE WITHIN THE COST BENEFIT ANALYSIS FOR THE PROJECTS FINANCED BY THE EUROPEAN UNION

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This paper will be later used within the Doctoral thesis: “The Mechanism of Financing Investment Projects by Usage of European Structural Funds”, which is currently under development at the University Babeş Bolyai Cluj Napoca, Faculty of Economics and Business Management, under the coordination of the prof. univ. dr. Ioan Trenca. An increasing debate is rising recently between the academic community, the business community, the private lending institutions(banks, investment funds, etc.) and the officials of the Romanian Government and of the European Union regarding the proposed method for calculation of the residual value in the European financed investment projects. Several methods of calculation of the Residual Value were taken into consideration and contested by different parties in order to prepare and to submit financial analysis studies for investment projects proposed to be financed within the European Regional Development Fund(ERDF). In this context, the present paper proposes to address the three main methods of calculation of the residual value and later to study its impact over the indicators, especially over the Internal Rate of Return, obtained in the financial analysis for an investment project proposed by a Romanian medium sized company. In order to establish the proper method which should be used for selection and calculation of the residual value previously published studies and official documentations were analyzed. The main methods for calculation of the residual values were identified as being the following: A. the residual market value of fixed assets, as if it were to be sold, B. accounting economic depreciation formula and C. by using the net present value of the cash flows. Based on these methods the research model was elaborated, and using the financial data of the proposed infrastructure investment was created a case study. According to the realized study a pattern was established for proper determination of residual value and for determination of IRR and methods A and C were proposed to be used. This paper tries to analyze a specific problem of the Romanian enterprises which access European funding, so it can be further used to improve the current methodology of the ERDF programme in Romania: Sectorial Operational Programme “Increase of Economic Competitiveness”.

Key words: Cost benefit Analysis, Residual value, IRR, Investment, Structural Funds, Valuation

JEL Codes: G30, O16, G32, G38, F35, C63, C12

Introduction

The integration of the Romania into European Union brought new opportunities for the Romanian private enterprises both concerning the accession of their products and services to the single market and also accession of additional co-financing for funding their business infrastructure investments(Droj, 2010). The issue of attracting European Funds for financing infrastructure investments is also tackled by the author within the Doctoral Thesis: “*The Mechanism of Financing Investment Projects by Usage of European Structural Funds*” which is currently under development at the University Babeş Bolyai Cluj Napoca, Faculty of Economics and Business Management, under the coordination of the prof. univ. dr. Ioan Trenca.

European funding is considered to be one of the hot topics in Romania and all over Eastern Europe since its novelty and its expected capacity to improve the life of the newly integrated European citizens both by financing public and private strategic investments in various fields of activities: public urban infrastructure, transportation services, agriculture infrastructure, social

and educational infrastructure, tourism and business public and private infrastructure, human resources, etc. One of the main goals of these European Funding programmes are to European Union Cohesion policies. As its main instruments and for improvement of the competitiveness of the “weaker” regions were established the European Regional Development Fund (ERDF) and the European Social Fund (ESF), otherwise known as the Structural Funds, as well as the Cohesion Fund. Through these instruments European Commission invests in thousands of projects across all of Europe’s regions to achieve its primary task: to promote economic and social cohesion by reducing these disparities between Member States and regions (European Commission, 2009). The budget of the Cohesion Policy €347 billion EUR for 2007–2013, represents the single largest source of financial support at EU level for investment in growth and jobs, designed to enable *all regions* to compete effectively in the internal market.

In this context, the private companies benefit of increased opportunities for accessing European Funding which gives them a better chance for increasing their competitiveness and for extending distribution of their products and services on the entire European market and beyond. The most important production infrastructure financing programme for the Small and Medium Enterprises(SME) operating in Romania is considered to be the Sectorial Operational Programme “Increase of Economic Competitiveness” (further referred to as SOP IEC) which offers financial support for the consolidation and modernization of productive sector through investments(Guvernul României, 2009).

The SOP IEC aims to strengthen the strategic focus of the Economic and Social Cohesion policies across Romania, and to make the correct and appropriate linkages to the European policies and the Lisbon Strategy for growth and job creation. In order to be financed within this programme the SMEs have to present a business plan containing a cost benefit analysis study. This analysis has as main goals to establish if the proposed investment is sustainable and has potential for generating further economic and financial growth for the company, in particular, and for the society in general terms. One of the most important aspect for a proper realized cost benefit analysis is the calculation of the residual value. Gapenski (2005:592) considers the residual value “much riskier than the other flows”. In this context this paper will cover the most relevant literature in the field and will try to estimate the differences between the most common methodologies used for obtaining a residual value in order to acquire an acceptable IRR.

The importance of the Residual Value – Literature Review and Research methodology

Seriously overlooked, recently, the establishment of a proper residual value for a proposed investment proves to be a key element for obtaining “acceptable” values for the indicators used in the financial analysis. Opinions regarding the most suitable method have been contradictory and transformed this issue in a problematic over the past years.

According to the “*Guide to COST-BENEFIT ANALYSIS of investment projects - Structural Funds, Cohesion Fund and Instrument for Pre-Accession*”(European Comission, 2008:36) the discounted value of any net future revenue after the time horizon of the project has to be included in the residual value. The same document concludes that this “is the present value at year n of the revenues, net of operating costs, the project will be able to generate because of the remaining service potential of fixed assets whose economic life is not yet completely exhausted”. If a sufficiently long time horizon will be selected this value can be also 0 or it should have a negligible value. But in practice this is not always the case, and it should be recorded either “as negative investment or as a benefit the salvage value of fixed asset or any remaining capacity to generate net revenues”. This is why the residual value is also considered to be the liquidation or terminal value(Damodaran, 2002:425) and is considered to have a big importance over the future value with direct implications in the determination of the IRR:

$$\sum_{t=1}^{t=n} \frac{CF_t}{(1+k_c)^t} + \frac{\text{Terminal Value}_n}{(1+k_c)^n}$$

The current literature recommends three possible methods for calculation of the residual value:

- Method A - first choice is by **considering the residual market value of fixed assets, as if it were to be sold** at the end of the time horizon considered, and of remaining net liabilities(European Commission 2008:36). In this case the residual value becomes also the terminal value that reflects the estimated value of the company at that point. This method was highlighted and analysed by several authors (Damodaran, 2002:426, Citybank 302, Livingstone and Grossman 2002:622, Kaliski et all, 2007:301, Helfert, 2001:53). This method is also based on respecting the International Valuation Standards (IVS) established by the International Valuation Standards Comitee(IVSC). Also the method is accepted by the Romanian Management Authority of the SOP IEC programme and is recommended to be used in 2011 SOP IEC call of proposals(Guvernul României, 2011). On the other hand the method is common in Romania to the practice imposed by ANEVAR(National Association of Romanian Valuers) which often use this method for enterprise or mobile goods valuation.

- Method B - by computing **the residual value of all assets and liabilities**, based on some standard **accounting economic depreciation formula** (usually different from depreciation for the determination of capital income taxes), method recognised by European Commission(2008:36) and Citibank(1994:300) and supported by members of several professional associations from Romania(especially CECCAR), but highly contested by the Romanian Management Authority of the SOP IEC programme and forbidden to be used under SOP IEC starting from 2011(Guvernul României, 2011). This method was one the most popular to be used, even if major project implementation specialists have drawn negative conclusions over its effectiveness.

- Method C - by computing **the net present value of cash flows** in the remaining life-years of the project. This method is also called the Gordon Growth Model and is appreciated by most of the specialists(Friedlob and Schleifer, 2003:212, Damodaran, 2002:426, Helfert 2001:231, Citybank 1994:301). Some specialists are also considering the Advanced Gordon Growth Model as it is presented below:

$$\begin{array}{l} \text{Residual value} \\ \text{(using Gordon} \\ \text{Growth Model*)} \end{array} = \frac{\text{Terminal year cash flow} \times (1 + \text{Growth rate})}{\text{Discount rate} - \text{Growth rate}}$$

On the other hand the supporters of this method have drawn several observations regarding the limits of the method, especially when concerning the fact that the growth rate cannot be maintained stable for a longer period of time and it depends also by external factors like fiscal and economic barriers or advantages. Also this method is not considered applicable by the specialists to a large number of companies for which seems impossible to maintain a high growth rate for several years in a row or to have the type of products and activities on a longer period of time.

After the determination of the residual value, the results have to be used in the calculation of the IRR/C and IRR/K as an input in contradiction with the costs of the investments which have to be diminished. For example, in case of a infrastructure investment, the value of the initial investment(including the ERDF grant) is considered to be a contribution with negative value(sign -), the values of the cash flows can be either positive or negative(depending on their real value) and the residual value is considered to bring a positive outcome of the project(sign +), since it is considered to bring additional value for the investment.

The Internal Rate of Return (IRR) is defined as the discount rate that zeroes out the net present value of flows of costs and benefits of an investment, that is to say the discount rate of the equation below(European Commission, 2008:212):

$$NPV(S) = \sum [S_t / (1 + IRR)^t] = 0$$

The authors draw the conclusion that the Internal Rate of Return is an indicator of the relative efficiency of an investment, with known deficiencies, and it should be used with caution. The European Commission(2008:210) brings to attention the fact that: if the sign of the net benefits, benefits minus costs, changes in the different years of the project's lifespan(for example - + - + -) there may be multiple IRRs for a single project. In these cases the IRR decision rule is impossible to implement. Another setback for using IRR can be the fact that IRR contains no useful information about the overall economic value of a project, fact recognized even by the European Commision(208:211) which encourages also the usage of the Net Present Value Method as presented below, to correct false results of the IRR method:

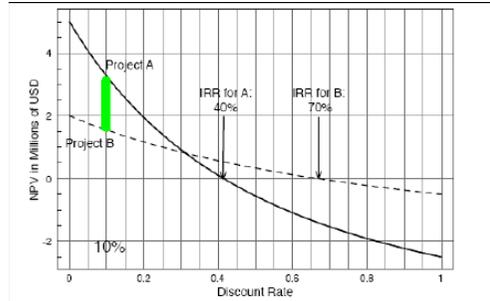


Fig. no 1 IRR and NPV of two mutually exclusive alternatives (Source: Ley, 2007)

Since the goal of this study is to determine which are the differences in the values of the IRR when considering the usage of different residual values(obtained through all presented three methods), in the following chapter we will set a case study using a project proposed by a Romanian production company which tries to access SOP IEC funding in 2011.

Case study – Evaluation of the residual value and of its influences over the IRR in case of a Romanian production company

As mentioned above, a production company which is intending to access European funding to co-finance its infrastructure investments has to fulfil several of the criteria established by the management authorities of the SOP IEC Programme. Some of these criteria are referring to the results of the financial analysis and especially of the results obtained by the Net Present Value and by the Internal Rate of Return Indicators. In the recent months contradictory discussions have been raising between all factors interested in the SOP IEC programme regarding the proposed method for calculation of the residual value in the European financed investment projects. The levels of the debates were extremely high, but no studies have been presented by the involved parties regarding the efficiency of the methods proposed over the final value of the IRR.

In order to test each method for obtaining the residual value Company Test A has been selected. Its activity is mainly production and its management are interested to expand the activity in the following years both as increasing the number of products on the market and also improving the existing products as highly qualitative ones with competitive prices in order to extend their current market abroad in Hungary, Bulgaria, Serbia and Republic of Moldova. The project consists in construction of a new high-tech production facility(4000 sqm) and acquisition of highly productive equipments in the field of plastic fibbers. The total value of the proposed project is considered to be 13,276,000 RON, approximately 3.3 million EUR from which 70% will be requested from ERDF funding.

In order to establish the IRR all three methods for calculation of the residual value have been evaluated, even if method B is not considered eligible by the Management Authority of SOP IEC.

By using **Method A**, respecting the International Valuation Standards (IVS), the investment was evaluated as if it were to be sold at the end of the time horizon considered, and were also evaluated the remaining net liabilities. By using the market price comparison method and the capitalization rate which is used within the field of investment was established that the terminal value is: 7,000,000 RON. In this case the terminal value becomes also the residual value that reflects the estimated value of the investment at that point. It is important to remark that this method is accepted by the Romanian Management Authority of the SOP IEC programme and is recommended to be used in 2011 SOP IEC call of proposals(Guvernul României, 2011). By this method the IRR=0.52% which is considered an excellent value and which recommends the project for financing. By this method the IRR=0.52% which is considered an excellent value and which recommends the project for financing.

Table 1. IRR determined by using residual value obtained through Method A

Anul	Costuri de investitii	Costuri operare	Costuri Totale	Beneficii totale	Coefficient actualizare	Costuri de operare actualizate	Beneficii totale actualizate	Valoare netă actualizată în an	Valoare netă actualizată cumulată
	4.843.000	0	4.843.000	0	0,994827	4.817.947	0	-4.817.947	-4.817.947
0	8.433.000	0	8.433.000	0	0,989681	8.345.976	0	-8.345.976	-13.163.923
1	0	1.285.673	1.285.673	2.125.500	0,984561	1.265.823	2.092.684	826.861	-12.337.062
2	0	1.328.173	1.328.173	2.224.500	0,979468	1.300.902	2.178.826	877.923	-11.459.138
3	0	1.503.173	1.503.173	2.397.000	0,974401	1.464.693	2.335.639	870.946	-10.588.193
4	0	1.538.173	1.538.173	2.454.500	0,969360	1.491.043	2.379.294	888.251	-9.699.942
5	0	1.606.673	1.606.673	2.585.500	0,964345	1.549.388	2.493.315	943.928	-8.756.014
6	0	1.671.273	1.671.273	2.724.500	0,959357	1.603.347	2.613.768	1.010.421	-7.745.593
7	-7.000.000	1.759.583	-5.240.417	2.871.500	0,954394	-5.001.423	2.740.542	7.741.965	-3.629
TOTAL	X	X	X	X	X	15.417.825	11.479.758	X	X

RIR/C= 0,520%

Source: own calculation

The Method B was later used, and the residual value was determined as an accounting residual value, according with the Romanian legislation. The residual value obtained was 2,824,308 RON.

Table 2. IRR determined by using residual value obtained through Method B

Anul	Costuri de investitii	Costuri operare	Costuri Totale	Beneficii totale	Coefficient actualizare	Costuri de operare actualizate	Beneficii totale actualizate	Valoare netă actualizată în an	Valoare netă actualizată cumulată
	4.843.000	0	4.843.000	0	1,062361	5.145.012	0	-5.145.012	-5.145.012
0	8.433.000	0	8.433.000	0	1,128610	9.517.568	0	-9.517.568	-14.662.580
1	0	1.285.673	1.285.673	2.125.500	1,198991	1.541.510	2.548.455	1.006.945	-13.655.635
2	0	1.328.173	1.328.173	2.224.500	1,273760	1.691.774	2.833.480	1.141.706	-12.513.929
3	0	1.503.173	1.503.173	2.397.000	1,353193	2.034.083	3.243.603	1.209.521	-11.304.408
4	0	1.538.173	1.538.173	2.454.500	1,437579	2.211.245	3.528.537	1.317.293	-9.987.116
5	0	1.606.673	1.606.673	2.585.500	1,527227	2.453.754	3.948.645	1.494.891	-8.492.224
6	0	1.671.273	1.671.273	2.724.500	1,622466	2.711.583	4.420.408	1.708.825	-6.783.399
7	-2.824.308	1.759.583	-1.064.725	2.871.500	1,723644	-1.835.207	4.949.443	6.784.649	1.250
TOTAL	X	X	X	X	X	19.449.933	16.102.721	X	X

RIR/C= -5,870%

Source: own calculation

The value of the IRR, after applying this method, became IRR=-5.87%, a negative IRR which is under the acceptable values for the programme. It also seems not to be correlated with the values of the NPV. From 2011 this method is a forbidden method to be used in realization of CBA in SOP IEC programme.

The third method used the Gordon Growth Model and was limited in the development of the growth rate by a contested measure: to limit the growth rate used in the formula to maximum 5%. In this case the residual value had a non realistic value of 798,467,395 RON and the IRR had been 75.20%, way over the maximum values accepted within a European funded project.

Table 3. IRR determined by using residual value obtained through Method C

Anul	Costuri de investiții	Costuri operare	Costuri Totale	Beneficii totale	Coefficient actualizare	Costuri de operare actualizate	Beneficii totale actualizate	Valoare netă actualizată în an	Valoare netă actualizată cumulată
	4.843.000	0	4.843.000	0	0,570776	2.764.269	0	-2.764.269	-2.764.269
0	8.433.000	0	8.433.000	0	0,325786	2.747.349	0	-2.747.349	-5.511.619
1	0	1.285.673	1.285.673	2.125.500	0,185951	239.072	395.238	156.166	-5.355.452
2	0	1.328.173	1.328.173	2.224.500	0,106136	140.967	236.100	95.133	-5.260.320
3	0	1.503.173	1.503.173	2.397.000	0,060580	91.062	145.210	54.148	-5.206.172
4	0	1.538.173	1.538.173	2.454.500	0,034578	53.186	84.871	31.684	-5.174.487
5	0	1.606.673	1.606.673	2.585.500	0,019736	31.709	51.028	19.318	-5.155.169
6	0	1.671.273	1.671.273	2.724.500	0,011265	18.827	30.691	11.864	-5.143.304
7	-798.467.395	1.759.583	-796.707.813	2.871.500	0,006430	-5.122.620	18.463	5.141.083	-2.221
TOTAL	X	X	X	X	X	3.303.346	912.447	X	X

RIR/C= 75,200%

Source: own calculation

Conclusions

One of the most important aspects for a proper realized cost benefit analysis is the calculation of the residual value. In this paper three methods for calculation of residual values were analyzed, used and tested in the proposed case study. As observed method B is both forbidden by the Management Authorities of the financing programme and also obtains to negative IRR.

Method C is recommended to be used by the management authorities but contested by a part of specialists since its limitations both in general, as analyzed above and in particular: the limitation of the growth rate to be used within the feasibility study. The values obtained are quite high and might endanger the approval of the project. In these conditions and considering the obtained results within the case study I consider that the Method A, which is also proposed by the management authorities, should be used by Test Company A in order to calculate the residual value of the investment and further the IRR.

The general drawn conclusion of this paper, which will be also highlighted further in the PhD thesis: *“The Mechanism of Financing Investment Projects by Usage of European Structural Funds”*, is that a company which considers to access ERDF funding under SOP IEC programme should take in consideration Method A or Method C for obtaining its residual value in order to have an acceptable IRR.

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OPTIMIZING LOCAL BUDGET BALANCING IN ROMANIA

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The importance of the local public finance is growing in accordance with the increasing proportion of the decentralization process. The mechanism of resource allocation, and especially the allocation criteria used, constitutes subjects of debate. Our objective pursued is to assess whether the avoidance of the first step for balancing the allocation of funds can provide enhanced fairness in balancing the local budgets across the country. Local budgets in Romania receive significant resources from the state budget in the form of amounts and quotas distributed from certain taxes, which are revenues for the state budget. Some of these amounts are designed to balance the local budgets. The distribution of funds from the state budget to the local budgets requires two steps. Firstly, the amounts are divided by county, secondly, these amounts are directed within the county especially towards localities which have a lower financial standing. Given the significant disparities between counties, we believe that this mechanism does not ensure fairness in the allocation because the funds distributed according to the first step may not use fair criteria to meet the requirements for balanced local budgets. Therefore, we intend to simulate a balanced allocation of national funds for eliminating the first step that produces the most significant inequities. Direct application of the second step of allocation, with its two phases, will provide more funds serving those local administrative units for the income tax per capita is lower than the national average. Comparing the values allocated for the year 2011 with those obtained in the simulation we will examine changes that occur after the application of this method which seems to be more equitable and appropriate. This work was supported by CNCSIS–UEFISCSU, project number PNII–IDEI 1780/2008

Keywords: local budget, budgetary resources, budget balancing, resource repartition

JEL: H71

Introduction

The decentralization process entailed the need to increase the financial resources of local authorities in order to correlate the expenses with payments (Tudor 2009: 336). A very practical and efficient option to supply the local budgets is the redirection of part of public revenues from the state budget to local budgets. The allocation mechanism is governed by the local public finance law and it envisages two steps: allocation by counties and then, distribution of public resources within the county. (Leonardo and others 2006: 52-54). Taking together, the steps create disturbances in resource distribution leading to inequities between the budgets of municipalities, towns and villages. This mechanism can be adjusted, however, changes might be influenced by the persuasion coming from the interested beneficiaries: the local authorities with high economic potential require the need for reimbursement the significant public resources, while the poorest local authorities need these resources for survival (IPP 2001: 50-51).

While at the macroeconomic level, the allocated amounts for the local budgets are strictly related to the revenues, at the local level, various situations of unfairness among local administrative units may occur due to the current distribution criteria. We consider that the two step division is one of the main causes for the inequities produced. We are pursuing to analyze the negative effects of applying the two steps allocation procedure as compared to the direct assignment.

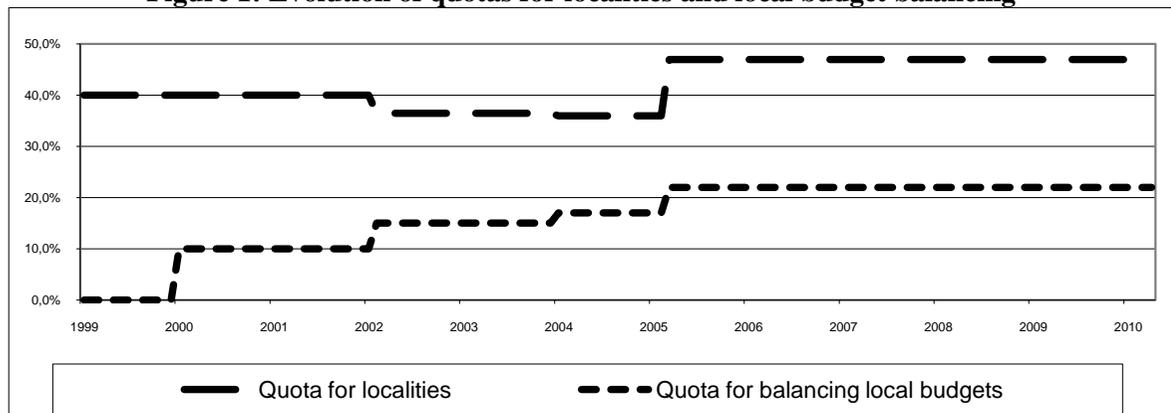
Afterwards, we will quantify the influence on the local budgets when applying the repartition exclusively on the basis of allocation criteria and methodology set out in the current second step of resource distribution.

Our analysis does not apply to amounts allocated to counties, Bucharest municipality and its sectors due to the repartition quotas that are different from those established for towns and communes. Also, the study does not intend to determine the impact of tax collected on allocated resources, as this indicator depends almost on the ability of the local authorities to collect its resources.

Quotas from income tax to balance the local budgets

The income tax received from the state budget in each administrative-territorial units shall be allocated in a quota of 56% share directly to the administrative territorial units where the income tax was collected (44% for the budget of town or commune and 12% for the county budget) while a percentage of 21% is redirected to the county fund to balance the local budgets. In case of Bucharest municipality, there is a special quota system (22.5% allocated to local budgets of the sectors, 44.5% to the local budget of Bucharest and 10% for the local budget balance). The evolution in time of the quotas has taken in consideration the needs and possibilities of the state budget. The evolution of these quotas is presented in the figure below.

Figure 1: Evolution of quotas for localities and local budget balancing



Source: Miricescu et al. 2010:108

The funds redirected to balance the local budgets, i.e. the percentage of 21% from income tax, are divided between the county budget (27%) and other local budgets. From the amounts redirected to towns and communes, 20% of the resources are allocated in projects assigned by the County Councils, the rest of resources being subject to the allocation mechanism in two stages.

In 2011, the volume of income taxes redirected to the local budgets is of 13.32 billion lei, in close correlation with the income earned by individuals from various sources of income. The evolution of income tax in the last five years is shown in the table below.

Table 1: quotas from income tax for local budgets (2007-2011)

Year	2007	2008	2009	2010	2011
Quotas from income tax (billion lei)	10,85	13,37	15,31	14,67	13,32

Source: Yearly budgetary laws

VAT amounts to balance the local budgets

A significant part of the value added tax is shifting to local budgets for the financial support of expenditures specific to the responsibilities decentralized at the local level. In addition to the

destinations clearly provided for the law, there are lump sums to balance the local budgets. In the last years, these amounts represent about 2 billion lei, as indicated in the table below.

Table 2: VAT amounts for local budgets (2007-2011)

Year	2007	2008	2009	2010	2011
VAT amounts for local budgets (billion lei)	12,77	15,06	17,62	17,00	13,12
VAT amounts for balancing local budgets (billion lei)	1,54	2,40	2,00	2,00	2,00

Source: Yearly budgetary laws

The resource allocation for each local budget is done in two steps. Initially, funds are divided per counties in an indirect proportion with the financial capacity of each county and in a direct proportion with its surface. When determining the financial capacity, consideration must be given to the following indicators: income tax per capita collected in the previous year and the number of population. This distribution takes into account the overall situation of each county and does not take into account the individual cases which may significantly influence the overall media. Tying the financial capacity with the number of population in a high proportion will put too much emphasize on the social nature of the key distribution (Cioponea 2008:71).

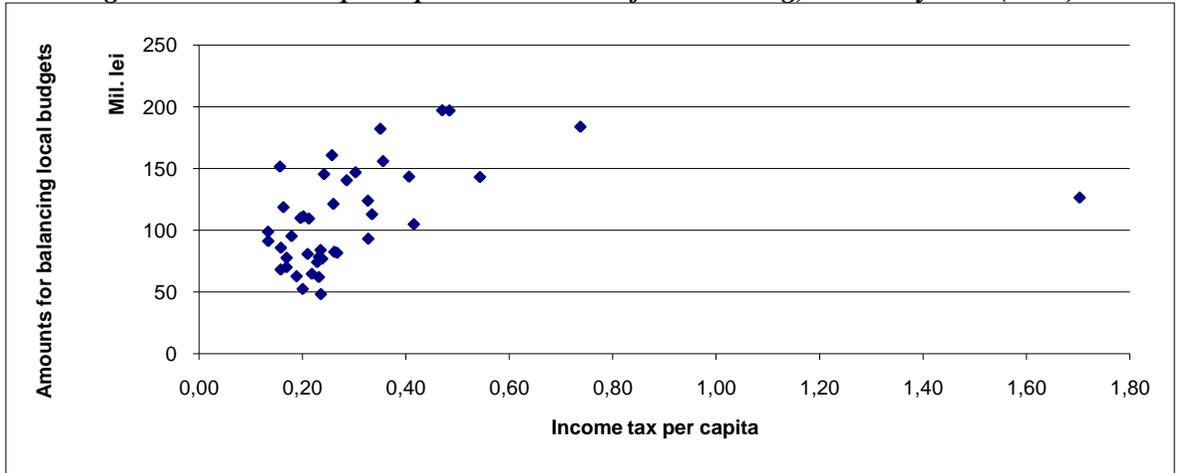
The in-county allocation of funds previously distributed in discriminatory conditions to all the counties takes place only in the second step. This step has two phases. The first phase covers only the localities which have the income tax per capita lower than the average recorded at a county level. The distribution criteria are the number of population and the surface of the in-city lands. Their assigned amounts, combined with those from the previous year may not lead to exceeding the county average. Thus, savings are made by applying the threshold criterion. The savings are redistributed to all localities with sufficient financial capacities and inversely proportional to its number of population.

The local public finance law provides also for granting of amounts derived from other taxes collected from the state budget. Up to now the mechanism has been applied only to VAT, but it will be extended to other taxes as local authorities will take over new powers (György and György 2011:69).

Allocation of resources in 2011

The quotas of income tax to balance the local budgets are allocated in the county in which the income tax were collected. Currently, there are notable disparities between counties in terms of receipts from income tax, such as the income tax per capita in the county which has the highest value (Ilfov County) reported to the county with the lowest value (Vaslui County, with 12.74), as shown in the figure below.

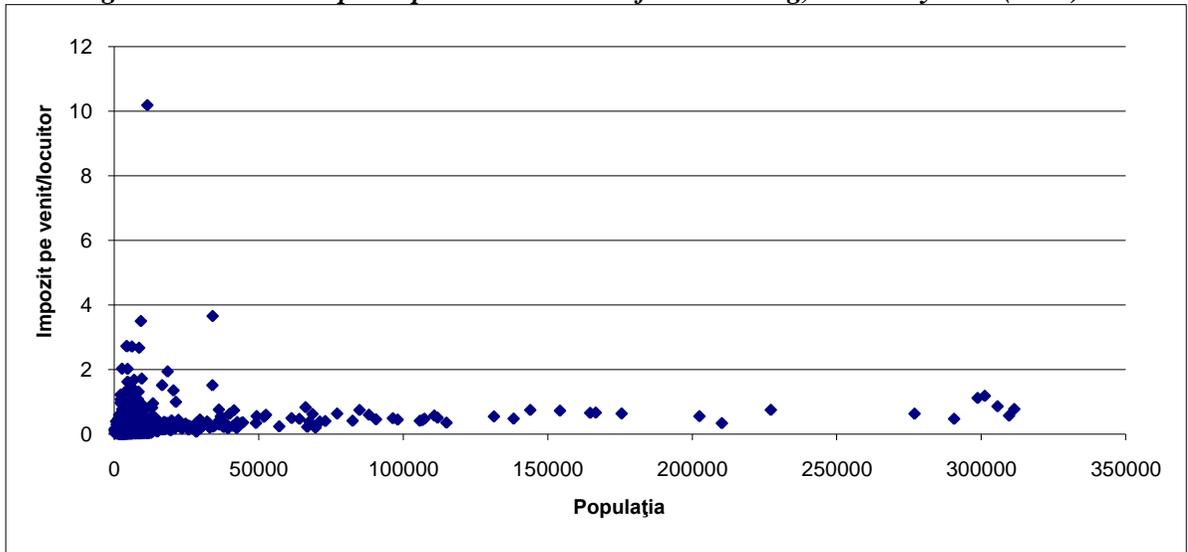
Figure 2: Income tax per capita and amounts for balancing, on county base (2011)



Source: calculations based on MAI data

The allocation of quotas for balancing the local budgets without considering the financial situation of each administrative unit favors the units from the counties having an income tax per capita higher those having an income tax per capita lower. Balancing local budgets in a county with resources collected in the same county only perpetuates the state of wealth or poverty in the respective county. Differences between localities are significant (values range from 13 to 10,191 lei per capita) and, likewise, there is no direct correlation relationship between city size (measured by number of inhabitants) and the amount of income tax per capita.

Figure 3: Income tax per capital and amounts for balancing, on locaity base (2011)



Source: calculations based on MAI data

According to the criteria for allocating quotas to balance the local budgets broken, only those localities having the income tax per capita lower than the average county were included in the first stage. Under the current methodology, localities in Vaslui County with an income tax per capita of 140 lei are not eligible for the first phase of distribution, while towns in Ilfov County with an income tax per capita of 1,700 lei are eligible because they are below the average of Ilfov county. In these circumstances, in 2011, above the average county were included 241 localities

(between 1 and 15 municipalities in each county), industrial and major commercial centers in the county. Due to the large variation of the income tax per capita along the counties, we can not draw a clear conclusion on the categories of localities which were above or below the average per county.

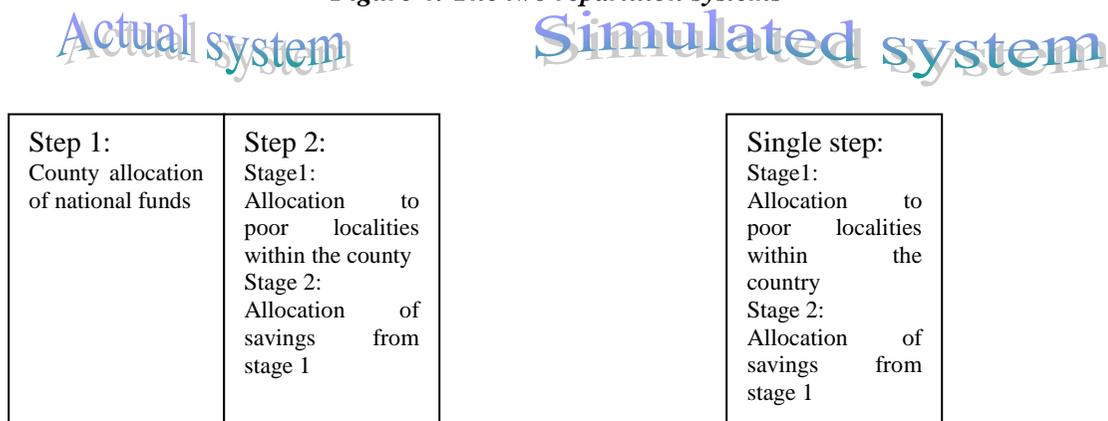
VAT quotas to balance the local budgets were allocated to counties based on their financial capacity. Although counties with high economic potential have been disadvantaged in determining the due amounts, they were not removed from the list of beneficiaries.

The amounts allocated to balance the local budgets have varied according to the following indicators: financial capacity, income tax collected in the previous year, number of population and surface. The smaller amounts of 5,000 lei came from each of the villages Oancea (Galati) and Călnic (Gorj). The largest amounts were allocated to municipalities like Medgidia (11.28 million lei), Hunedoara (12.37 million lei) and Turda (14.53 million lei).

Determination of amounts allocated to local budgets through a single national fund

The great shortcoming of the current distribution method is the fragmentation process in two steps, a mechanism that does not provide for a real support to the poor counties, but a mere slender advantage. We aim at balancing recalculation of benefits (allowances deducted from income tax and VAT quotas) based on a unique methodology by eliminating the barrier constituted from the administrative boundaries of the county. Further on, in the diagram below we present the differences between our proposed methodology and the existent one.

Figure 4: The two repartition systems



Thus, we simulate the entire distribution of values established at national level (excluding Bucharest) in 2011, amounted to over 4.5 billion lei (1.2 billion lei allocated to counties and 0.7 billion lei will be allocated for projects of the county). Subsequently, the amounts actually distributed in the two phases are 2.6 billion lei. Applying a consistent methodology, we do not intend to separate quotas and the amounts deducted accordingly. Distribution rules are set by the local public finance law for the distribution of payments in the county by following two distinct phases.

Summarizing the data at the national level (available for 3180 municipalities), the average income tax per capita is 316.22 lei. In these conditions, 204 localities are above the average while the rest of 2976 is below average. The major part of the 204 locations with the indicator over the average are situated in developed counties (72.5% of localities in Ilfov County, 20% of localities

in Constanta county, 11.5% of the localities in Prahova County) and to a minor extent, in poorer counties (one locality in the county of Calarasi, Salaj, Botosani, Vaslui, Buzau and Iasi).

Eliminating the first step in the distribution of funds, the beneficiary localities have been reclassified by replacing the quotas of rich units with those of the poor counties. Thus, 50 municipalities are eligible for funding in the first stage, while other 87 are not eligible, due to the income tax per capita lower than the national average.

Following the first phase of distribution, public funds were allocated to eligible local budgets amounted to 2.2 billion lei (i.e. 85.4% of the total). The remaining amounts were spent entirely in the second stage by all the budgets of administrative territorial units. Thus, Otopeni (it is the largest city tax income per capita) received only 1749 lei, while Hunedoara was distributed 8.37 billion lei. It can be noted that the margin is much reduced, suggesting a fair distribution.

Following the simulation, a number of 1420 local budgets received smaller amounts, and the remaining 1760 received larger amounts. Differences between the two methods vary from locality to locality. The reductions were registered in a percent over 99% (in 15 localities, all from Ilfov county). The increases occurred in a percent of 1627% for Ocnele town (Vâlcea). Analyzing the absolute values, significant reductions were found in Medgidia (11.08 million lei) and Turda (9.90 million lei). Also, Barlad received significant amounts (6.68 million lei) and Roman (5.70 million lei).

Compiling the data by county, it can be noted a reduction in the amount allocated to those localities that had income tax per capita higher than the national average, redirecting public funds to those administrative units, having the indicator under this threshold (see figures below).

Figure 5: Reduction of allocation for counties using single step repartition

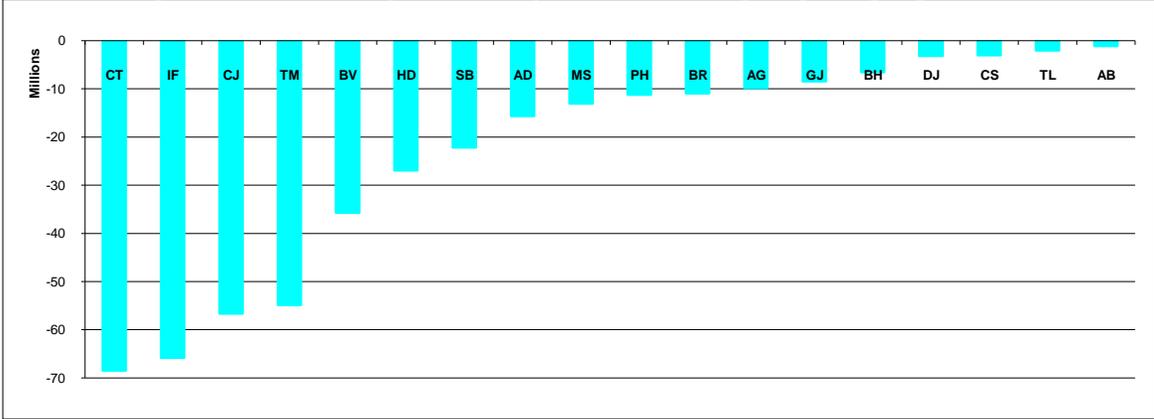
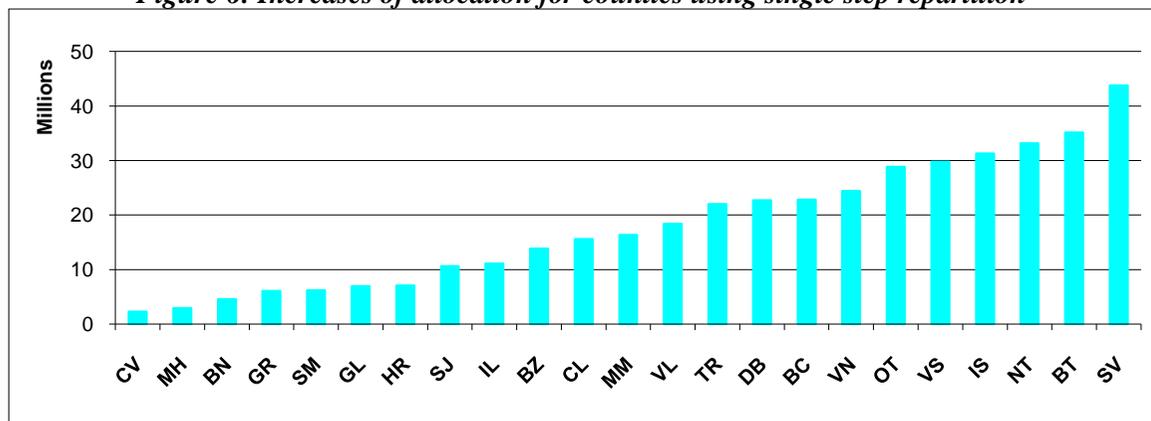


Figure 6: Increases of allocation for counties using single step repartition



Conclusion

The current system of allocating amounts to balance local budgets has two steps, which hamper the distribution and creates a series of inequities between the budgets of municipalities, towns and villages. By withdrawing the first step of the distribution and directly applying the second step might lead to a more equitable distribution because only the second step of the first stage provides a discretionary distribution to local budgets in localities with limited financial capacity. Our simulation performed in all areas of the country (except for Bucharest) highlighted the need for further support towards the poorer counties (Suceava, Botosani, Neamt). Redistribution shall not consider the counties as a whole, but some localities taken individually. The simulation indicated that some localities could be entitled to receive amounts of ten times higher than those actually received in order to reduce disparities.

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EFFECTIVE CORPORATE INCOME TAX RATE IN ROMANIA: A MICRO-BACKWARD LOOKING APPROACH

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Abstract: Within the framework of micro-backward looking methodology, the paper computes the effective corporate income tax rate for Bucharest Stock Exchange non-financial companies for 2000 – 2009 period, using data from companies financial reports. We find that effective tax rate computed as profit tax/pre-tax income ratio was below the statutory tax rate, throughout the period, except for the year 2009 (when an alternative minimum tax was introduced) and the differences have diminished since the flat tax was adopted (2005). When applying a correlation analysis, we find that the difference between this effective tax rate and the statutory tax rate presents a strong negative correlation with the return on assets ratio (ROA). Also, we have find that commerce is enjoying the most favourable tax regime, while energy is the most heavily taxed.

Key words: effective corporate income tax rate, backward looking methodology

JEL codes: H22, H25

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1. INTRODUCTION

Measuring the fiscal burden that companies have to cope is a matter of great interest both for business managers and policy makers. Doing business in a global market often reveals competitiveness issues that are linked to taxation. Often, the tax rates cuts are partial offset by increasing tax bases. Effective tax burden is a matter far beyond the tax rate itself, although it is one of the most significant determinants. Thus, we want to check whether the effective tax rate that companies borne was in line with the general trend of statutory tax rates cuts that took place in Romania, as elsewhere in Europe. Indeed, the tax competition urge governments to cut tax rates consistently, but the ever increasing need for public spending contributes to the adoption of tax base broadening measures such as introducing of thin capitalization rules, limitation of loss relief or of some expenses, among which interest expenses plays a significant role, etc.

In this context, we compute effective corporate income tax rate as profit tax/pre-tax income (earnings before taxes) ratio for the non-financial companies traded at Bucharest Stock Exchange for the period 2000 – 2009. The availability of data is one of the major problems when dealing with micro-backward looking methodology, especially when we are confronting with a transition economy. Thus, for the scope of this paper we will use INFIN database, a database that was created by the author through a research grant and which contains detailed financial data reported by the Bucharest Stock Exchange listed companies.

Romania is generally regarded as a country with low taxation for firms, the corporate income tax rate being only of 16 percents. It is interesting to see, if, in real world, companies manage to take advantage of tax base determinants in order to be able to minimize the profit tax to the extent possible, and if this could result in higher rate of returns. For the scope of this paper, we have considered only corporate income tax, although INFIN database allows for taking into consideration real estate taxes, social contributions and any of all other public finance liabilities that a company has to pay.

Thus, our main research goal is to assess the effective corporate income tax rate for the most relevant Romanian companies, namely those traded at Bucharest Stock Exchange and to see whether companies that bear a lower effective taxation could have higher returns. Throughout the

paper, we provide evidence concerning the effective corporate income tax rate on annual basis and also for different industries.

Several conclusions can be drawn from the analysis. We find that effective tax rate computed as a profit tax/pre-tax income was permanently below the statutory corporate tax rate, except for the year 2009, when an alternative minimum tax was introduced. When performing a correlation analysis, we find that the difference between effective tax rate and statutory tax rate is negatively correlated to return on assets ratio (-0.636). Also, our effective tax rates have recorded a constant decrease throughout the period in accordance with the general trend of statutory tax rates. The single notable exception is the year 2009, when our rates increased, showing a poor efficiency of fiscal measures taken by Romanian authorities in their struggle to fight the crisis. As for sector analysis, we find that commerce is enjoying the lowest effective taxation, while energy is the most heavily taxed.

The paper is organized as follows: section 2 describes the methodology in the context of the most relevant previous research in the field, section 3 presents the results and section 4 concludes.

2. METHODOLOGY

Computing the effective taxation of companies can be achieved by two major, well-established methodologies: forward-looking methodology and back-ward looking methodology.

In terms of forward-looking methodology, the Devereux & Griffith approach, which is based on a hypothetically investment project (King and Fullerton) is generally regarded as the standard in the field. Another well-known methodology, based on model firm approach, is European Tax Analyzer, developed by ZEW Mannheim and University of Mannheim. Both were used by European Commission in a series of studies regarding company taxation (CEE, 2001, Spengel et al, 2008). In the recent years, another model firm approach emerged, namely that of Djankov et al. (2010), which is jointly used by the World Bank, International Finance Corporation and PricewaterhouseCoopers (see doingbusiness portal). That methodology includes under the generic names of labour related taxes, the payroll taxes and social contributions for which the statutory incidence falls on companies when assessing the “total tax rate” (TTR).

In terms of backward-looking methodology, the first insights were those of Collins and Shackelford (1995), followed by Buijink, W., Janssen, B., Schols, Y. (2002) and Nicodème, G. (2007). The difficulties of getting the firm level data, along with the differences in accounting standards make this methodology harder to implement. Nevertheless, several rankings were made, and for review see Nicodeme (2007).

Whithin the framework of backward-looking methodology, we will compute the effective tax rates for companies listed on Bucharest Stock Exchange using data from financial reports for the period 2000-2009. We use the unconsolidated data in order to better capture the specific of the fiscal code and also to provide a larger period of comparability of data. The data of the INFIN database cover sixty nonfinancial companies listed on regulated market at Bucharest Stock Exchange, thus offering 600 company years data. The sixty companies taken into survey have an aggregate turnover of about 8.3% of Romanian GDP in 2008, and 6.5% in 2009 when global crisis hit Romania. The period surveyed started in 2000, because this particular financial year was the first in which the companies reported data using procedures congruent to the Fourth European Directive accounting regulations and to the International Accounting Standards. Luckily, the year 2000 also coincides with the start of a new era in Romanian fiscal framework, when the statutory tax rate for profit tax dropped from 38% to 25%. The comprehensive list of companies can be consulted on the National Commission of Securities Exchange site: <http://www.cnvmr.ro/InfoUtile/ro/RapoarteEmitenti/RapoarteEmitenti.html>). The sources of data were financial reports of listed companies available on the Internet sites, both of companies and

Bucharest Stock Exchange and National Security Commission. Also, a subscription access to Bucharest Stock Exchange data directory was needed in order to get the data for earlier years.

In order to compute the effective tax rate, several considerations must be made related to the terms involved. We compute effective corporate income tax rate as profit tax to pre-tax income ratio. We believe that pre-tax income or earnings before taxes (“profitul brut” in Romanian language) is the proper measure of the “tax base”. Previous studies employed either pre-tax income (adjusted more or less) or gross operating profit. Buijink, Janssen and Schols (2002) and Collins and Shackelford (1995) used the pre-tax income when computing their effective tax rates, while Nicodeme (2007) opted for gross operating profit.

Thus, the effective corporate income tax rate, can be expressed as follows:

$$ETR = \frac{CIT}{PI} * 100$$

where: *CIT* = corporate income tax;

PI = pre-tax income;

We think that if we want to take the most out of the features of the micro-backward looking methodology, the most appropriate indicator for the “tax base” is pre-tax income which contains not only operating profit, but also financial profit and exceptional profit. If the latter is almost insignificant in our sample, the financial profit includes interest expenses, which in Romania, as elsewhere, are deductible when computing taxable profit under thin capitalization rules (in certain circumstances). According to conventional theory, this may create an incentive to use debt as oppose to equity, and the price for this action (interest expenses) is reflected in financial outcome of the company.

3. RESULTS

In this framework, we have computed the effective corporate income tax rate for Romanian companies traded at Bucharest Stock Exchange for the period 2000 – 2009. The results are presented in table no. 1. The table also depicts the statutory corporate income tax rate and the between effective corporate income tax rate (ETR) and statutory tax rate (STR)

Table no. 1. The effective corporate income tax rate (ETR), the statutory tax rate (STR) and the difference between them (2000 – 2009)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Effective corporate income tax rate ETR	19.87	17.36	18.18	22.65	21.42	14.83	13.37	14.86	12.59	16.28
Statutory corporate taxation rate STR	25	25	25	25	25	16	16	16	16	16
Difference ΔR (ETR ₁ – STR)	-5.13	-7.64	-6.82	-2.35	-3.58	-1.17	-2.63	-1.14	-3.41	0.28

Source: fiscal legislation and own computations

As we can see, the effective tax rate was below statutory tax rate throughout all the period surveyed, except for the year 2009. Companies were able to benefit from deductions when computing taxable income, and as the tax rate was reduced to 16% in 2005, the difference diminished as a result of the tax base increase. In 2009, an alternative minimum corporate tax

was introduced, along with a restriction of deductibility for some company's expenses. This led to an increase of effective tax rate above the statutory tax rate in the middle of the economic crisis that hit Romania during 2009. The gap between our effective tax rate and statutory tax rate can be correlated to some financial ratios (return on assets, return on equity and net profit margin). The results are shown in Appendix A, from which we can retain only the strong negative correlation of -0.636 between ΔR and ROA, significant at 0.05 level. The coefficient of determination R^2 is therefore 0.40, so 0.40 of the variability of ROA can be explained by the variability of ΔR .

When performing a sector analysis, we find that commerce is enjoying the most favourable tax regime, while the energy is the most heavily taxed. The results are presented in table no. 2.

Table no. 2. Effective corporate income tax rate for different industries

Sectors	Effective corporate income tax rate
Commerce	14.51
Manufacturing industry	15.76
Energy	31.44
Hotels and restaurants	15.28
Construction	22.27
Extractive industry	21.91
Transport	24.17

Source: own computations

Basically, we can see that we have three major situations: commerce, manufacturing industry and hotels and restaurants that have an effective corporate income tax rate around 15%, construction, transport and extractive industry that bears an effective profit taxation of around 22%-24% and energy with an effective tax rate of 31.44%. Thus, commerce, manufacturing industry and hotels and restaurants were the sectors that managed to the biggest extent to take advantage of tax base determinants in order to reduce the effective corporate income tax rate.

4. CONCLUSIONS

Our results show that effective tax rates declined during the period surveyed, in accordance with the general reduction of statutory tax rates. If we were to assess the efficiency of fiscal policy in fighting the crisis, our data showed that in 2009, the year in which the crisis hit Romania, effective tax rates for companies increased, indicating a poor performance of fiscal tools in addressing the economic downturn. This can be attributed to the adoption of an alternative minimum tax for companies starting and to the limitation of deductibility for certain company expenses (from May 2009). Making more money for public finance can have adverse effects on businesses. One can conclude that in the middle of the economic crisis, the fiscal measures set by Romanian authorities impose a supplementary burden on companies, and this was, undoubtedly, not a good support for companies, which had already been dealing with major difficulties. When applying a correlation analysis, we find that the difference between this effective tax rate and the statutory tax rate presents a strong negative correlation with the return on assets ratio (ROA). Also, we find that commerce was the most favourable taxed sector, while energy has to deal with the heaviest tax burden.

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Appendix A: Pearson's coefficient of correlation between ΔR (difference between ETR_1 and statutory tax rate and return on assets, return on equity and net profit margin)

Correlations

		ETR1minusRS	ROA	ROE	NPM
		1			
ETR1minusRS1	Pearson Correlation	1	-,636*	,321	-,350
	Sig. (1-tailed)		,024	,183	,160
	N	10	10	10	10

*. Correlation is significant at the 0.05 level (1-tailed).

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
ΔR	,165	10	,200*	,955	10	,731
ROA	,184	10	,200*	,947	10	,630

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
ΔR	,165	10	,200*	,955	10	,731
ROA	,184	10	,200*	,947	10	,630

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

VALUE ADDED TAX IN THE ECONOMIC CRISIS CONTEXT

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Abstract

This article tries to present the major aspects concerning the value added tax in the context of economic crisis in European Union countries and Romania. The paper realizes an analysis of the impact of economic crises on VAT in the European space underlining the current situation when the revenues from VAT represent a valuable source of financing the public expenditures. In Romania the economic crises has led to increasing of VAT rate from 19% to 24%. This measure is an important fiscal measure for the state budget and this study tries to reflect the impact of this VAT rate increase on the public revenues and consumption.

Keywords: value added tax, economic crises, tax revenues

Cod JEL: H23, H3, H22, G18.

Introduction

Value added tax is a key element of taxation system for many countries, an important and a reliable source of revenue for their budgets. For European Union countries VAT is assuring a significant part of the tax receipts counting 7% of GDP. Considering the share of VAT receipt in total tax receipts the highest ratio is in Bulgaria 35% and the minimum is in Italy only 13% from the total tax revenues and for EU 27 as average is 17%.

In times of economic crisis, the budget revenues are significantly affected by a sharp decrease. Many factors have an important contribution to this decline like: the tendency of some tax bases to contracts – incomes, profits, consumption; a decline in commodity prices and related revenues, or increasing the tax evasion. In this context for all EU countries a major issues is increasing the budget deficit and impossibility to financing the public expenditures.

The significance of VAT has increased in the financial crisis as governments need to raise more revenue to reduce their national debt, but are reticent to raise direct taxes on labour or capital at a time when employment and investment are needed. Personal income taxes increase is not a solution, especially in the context in which Europe is confronted with aging of the population. However it is necessary to increase social contributions in this regard but this increase will not provide budgetary shortfalls. On the other side increase of corporate taxation is not a good solution for the crise time because may be a cause for deepening crisis.

One way to improve the situation of public finances and increasing the tax receipts or at least maintaining at the same level like before the economic crises is through increasing the VAT rate. But this measure requires a careful assessment of the possible macroeconomic and

microeconomics effects. VAT rate increase is reflected in whole or in part on price of goods and services. With an unchanged nominal wages, rising prices is clearly diminishing real income of households (reduction in purchasing power), thus affecting consumption.

In the case of VAT, the most of the countries decide to increase rates, but also a high number of measures narrowing the base. Base narrowing was in many cases linked to equity considerations, as some countries reduced the tax burden on food or necessities. Generally, however, the measures increasing the standard VAT rates have had a much larger (positive) budgetary impact than the base narrowing measures; for the cases for which we have information, the ratio is almost 5:1 (Taxation trends in EU, 2010).

The impact of high VAT rates on consumer prices is not necessarily immediately, depending on many factors, including: the market rank for suppliers, the degree of competition, the elasticity of demand. Thus, firms from some industries prefer on the short term, may not fully pass on prices the VAT rate increased; the result is decreasing its profits to avoid reduction in demand, especially when they do not hold a significant position in the market, competition is strong and / or demand is very elastic.

The increase in VAT rate with only a few percentage points is unlikely to register a significant reduction in consumption, but on the other hand can increase VAT receipts for the state budget. Normally, any VAT rate increase can lead through higher prices to increasing inflation, yet inflation is only a temporary shock.

Increase VAT rate may influence the degree of regressive tax against current income households (VAT is a regressive tax against current income; current income decreased its share in the growing income). If, in addition to the standard rate of VAT, a reduced rate of VAT is applied for some consumption goods prevailing in low-income households, an increase for standard VAT rate would reduce the VAT regressivity and an increase for reduced VAT rate would lead to a higher regressivity. However, if there is a single VAT rate, the increase does not change the degree of regressive tax, according to the size and structure of consumption will not change.

A single rate of VAT means that the VAT payments by low-income households will be a higher proportion of their incomes than payments by higher income households. VAT is not regressive if tax payments are expressed as a percentage not of income but consumption. If consumption is used as the denominator, then by definition the impact would be proportional.

The tax burden of a VAT levied at uniform rate would also be largely proportional if the denominator is lifetime income instead of annual or current income because many income recipients are only temporarily in the lower income brackets. However, the main role of value added tax revenue is assuring the tax receipts for the state budget and not to achieve efficient redistribution of income in society; it is the quality of other taxes.

The VAT rate increase would leave a negative impact on the inhabitants purchasing capacity and the economy in general through decreasing of the consumption. But the negative of VAT rate increase will be felt also on the business activities. The increasing of VAT rate means inevitably results in the drop in consumption, and the consumption decline has a significant impact on the economy in general. During the economic crisis conditions it is important to promote the consumption increase.

VAT in European Union countries

Since 2009, under conditions of economic crisis, many European Union member states have resorted to increasing the standard VAT rate.

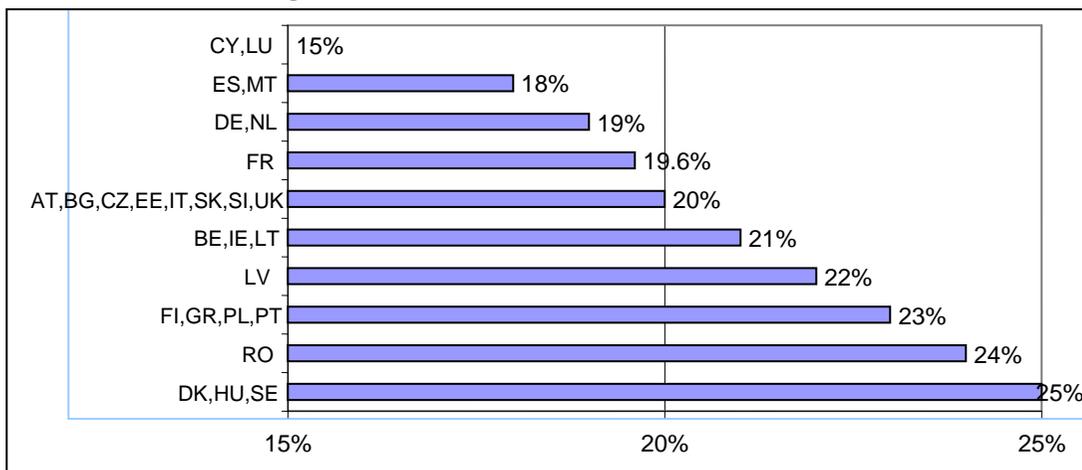
Table 1. VAT rates increases in EU countries

Country	Standard VAT rate increase	Old standard VAT rate	New standard VAT rate	Δ of rate
Czech Republic	01.01.2010	19%	20%	1%
Estonia	01.07.2009	18%	20%	2
Greece	15.03.2010	19%	21%	2
	01.07.2010	21%	23%	2
Spain	01.07.2010	16%	18%	2
Latvia	01.01.2009	18%	21%	3
	01.01.2011	21%	22%	1
Lithuania	01.01.2009	18%	19%	1
	01.09.2009	19%	21%	2
Hungary	01.07.2009	20%	25%	5
Poland	01.01.2011	22%	23%	1
Portugal	01.07.2010	20%	21%	1
	01.01.2011	21%	23%	2
Romania	01.07.2010	19%	24%	5
Slovakia	01.01.2011	19%	20%	1
Finland	01.07.2010	22%	23%	1
UK	01.01.2010	15%	17,5%	2,5
	04.01.2011	17,5%	20%	2,5

Source: European Commission

Currently, the standard rates of VAT charged by the EU Member States are between 15% (Cyprus and Luxembourg) and 25% (Denmark, Sweden and Hungary), with an average of 20.7%. It is standard practice ten different levels, being the dominant share of 20% share. It complies with the minimum of 15% imposed by the European Commission but not required and a maximum limit not achieved a significant near standard VAT rates applied by all Member States.

Figure 1. VAT standard rates in EU countries



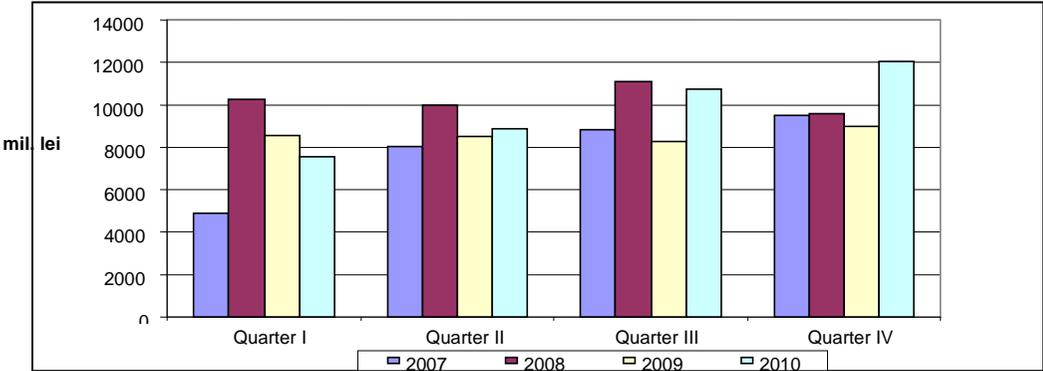
Source: European Commission

Although differences between the standard rates of VAT applied by some Member States are quite high (ranging up to 10 percentage points), there is some convergence of these shares, so 11 of the 27 countries using the standard rate between 19% and 20%. For instance, France has a VAT standard rate of 19.6% and two reduced rates. A reduced rate of 5.5% is applied to the absolutely necessary products and on the restaurant services and the reduced rate 2.1% for newspapers, plays and approved medicines (Sabau-Popa & all, 2010).

Current situation of VAT in Romania

In Romania, VAT receipts recorded in the last quarter of 2008 were only 0.6% higher in nominal terms than revenue in the fourth quarter of 2007, the conditions under which started to manifest in our country financial and economic crisis. It should be noted that although in the last quarter of 2008 saw a economic growth of 2.9%, final consumption fell in real terms than that registered in the fourth quarter of 2007 by 2.8%, while final household decreased by 4.7%, due to reduction in sales volume of retail goods and services rendered (Institutul Național de Statistică, 2009).

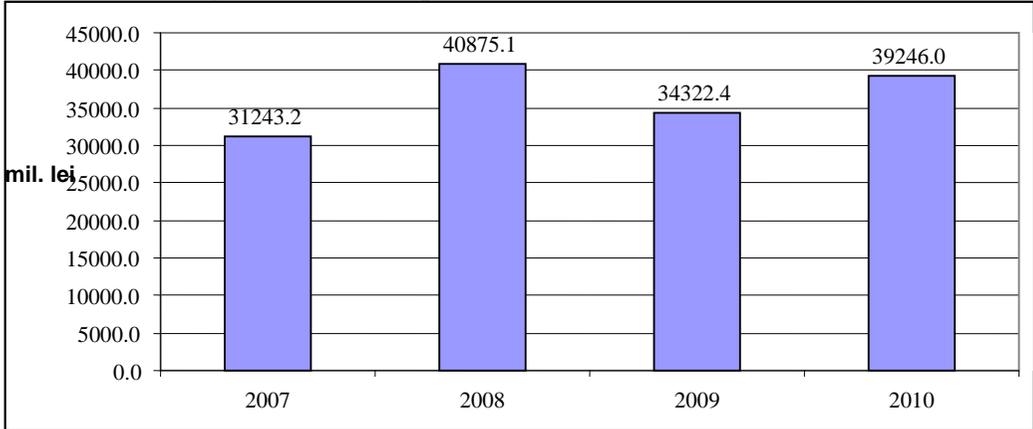
Figure 2. VAT receipts in Romania, 2007-2010, quarterly



Source: own calculation based on Finance Minister Data

Value added tax collected in 2008 was 30.8% higher in nominal terms, than that received in 2007, provided that, in real terms, household final consumption increased by 9.2% , Consumption increased by 8% and gross domestic product grew by 7.1%.

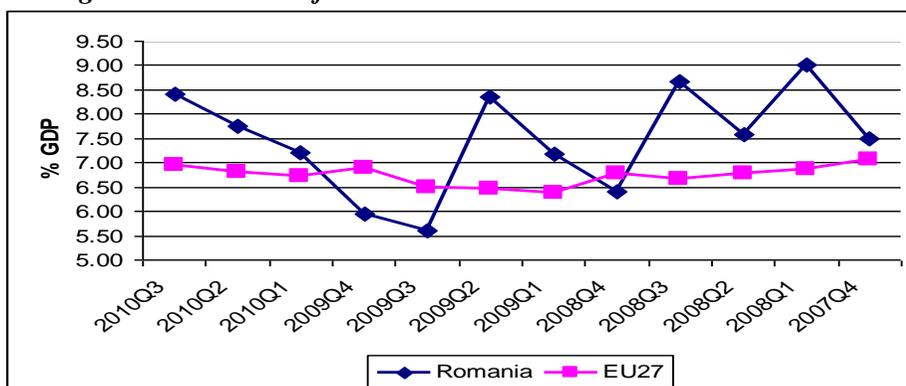
Figure 3. VAT receipts in Romania, 2007-2010, annually



Source: own calculation based on Finance Minister Data

In 2009, there was a significant decrease in revenues from value added tax compared to 2008. They have decreased by 16% in nominal terms, due to real decrease of final consumption of households with 10.8% and total final consumption decrease with 8.2% and 7.1% of gross domestic product (Institutul Național de Statistică, 2009). VAT receipts recorded in 2010 exceeded 14.3% in nominal terms comparative with 2009, while the standard rate of VAT was increased in July 2010 by 5 percentage points amid economic downturn mitigation (in terms real gross domestic product fell by 1.3%, consumption fell by 2.1% and household final consumption decreased by 1.6%) (Institutul Național de Statistică, 2009). Value added tax collected in 2010 was lower, in nominal terms, than that received in 2008 by 4%.

Figure 4. VAT as % of GDP in Romania and EU in economic crises



Source: Based on Eurostat data

Concerning the evolution of VAT as % of GDP in Romania and EU 27 in the economic crises time we can see that for EU there is a constantly evolution with slight fluctuations between 6 and 7 % of GDP. The increasing of VAT rate in Romania has a significant impact on the tax receipts because there is a continuously increase of the share of VAT receipts in GDP for 2010. Following this trend we can say that the rate increase was felt in the budget favorably even if the purchasing power of consumers has been affected.

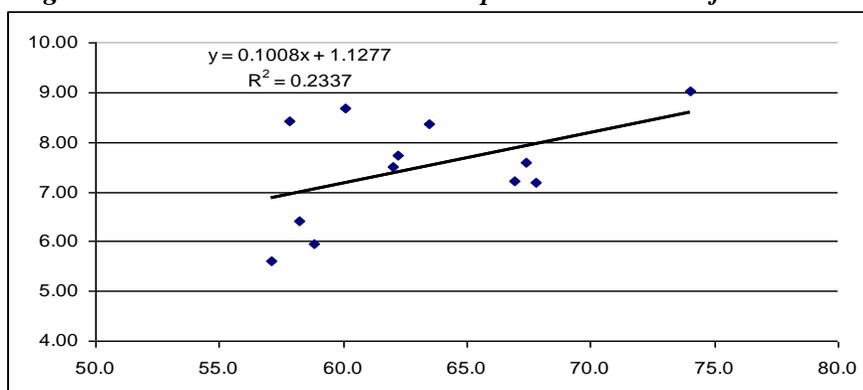
Table 1. Evolution of households' expenditures and VAT as % in GDP

VAT % GDP	Q4	Q3	Q2	Q1
2010		8.42	7.74	7.22
2009	5.96	5.6	8.36	7.19
2008	6.41	8.68	7.59	9.01
Final consumption expenditure of households % GDP	Q4	Q3	Q2	Q1
2010		57.8	62.2	66.9
2009	58.8	57.1	63.5	67.8
2008	58.2	60.1	67.4	74

Source: Source: Based on Eurostat data

Following the correlation between consumption and the VAT for the economic crises there is a direct correlation, if the consumption increase with 10% than the VAT receipt increase with 1%. The VAT receipts are correlated with consumption –in this case only household consumption with 23%.

Figure 5. Correlation between consumption and the VAT for Romania



Source: own calculations based on Eurostat data

Conclusions

In conditions of economic crisis the government may use the VAT to increase the tax receipts but not without macroeconomic consequences. With the emphasis on taxation is increasingly putting more on indirect taxes, value added tax can be considered a tax of the future, being by far the most important and largest indirect tax harmonization success tax.

Annex 1 VAT in Romania, 2007-2010, millions lei

	2007	2008	2009	2010
January	1.803,8	4.671,2	4.295,4	3.188,0
February	1.323,3	2.543,0	2.371,6	2.214,3
March	1.747,4	3.050,0	1.868,5	2.154,6
April	2.586,8	3.236,2	3.045,7	2.953,4
May	2.725,9	3.486,9	2.741,2	2.692,1
June	2.702,0	3.240,6	2.736,8	3.231,0
Julie	2.894,8	4.083,6	2.748,9	3.220,4
August	2.813,1	3.510,2	2.476,1	3.637,1
September	3.137,2	3.485,0	3.040,7	3.890,0
October	3.187,6	3.747,3	3.162,8	4.233,9
November	2.770,6	3.066,3	2.693,2	3.896,9
December	3.550,7	2.754,8	3.141,5	3.934,3
1st Quarter	4.874,5	10.264,2	8.535,5	7.556,9
2nd Quarter	8.014,7	9.963,7	8.523,7	8.876,5
3rd Quarter	8.845,1	11.078,8	8.265,7	10.747,5
4th Quarter	9.508,9	9.568,4	8.997,5	12.065,1
Total	31.243,2	40.875,1	34322,4	39246,0

Source: Finance Minister

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THE USE OF EXPERT SYSTEMS IN AGRICULTURAL INSURANCE. NECESSITY VS. REALITY

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The topic was chosen due to the fact that, although agricultural insurance is particularly needed in agriculture to achieve performance, its achievements are still modest. The importance of this research is in that it tackles a very important sector of the economy, agriculture, and puts forward an immediate viable solution that meets the current needs of farmers. The contribution of the authors is their innovative solution, namely the proposition to implement expert systems in agricultural insurance, as a means of promoting insurance products which, although they are not currently granted the due importance, have started to be acknowledged increasingly in recent times. The interest in this type of insurance is due to the recent climate changes whose effects are extremely damaging, and to the need to improve agricultural competitiveness on the common market as a result of trade liberalization in agricultural products.

The scientific literature in the field of expert systems highlights the benefits of implementing systems in all areas of economic and social activity, including insurance and agriculture, but it does not deal separately with the issue of agricultural insurance, despite its importance in the development of agriculture. This confirms the topicality of the study. Regarding the scientific methodology, in order to easily understand how expert systems work also by those who are not familiar with the field, we opted to present the stages of preparation of the system, namely: (a) preparing the knowledge database, (2) preparing the charts and (3) system encoding and assessment.

The research results, at the conceptual level, confirm the need for agricultural insurance expert systems because of the benefits it would create (ease of use, informing farmers about the existence and importance of agricultural insurance, increasing demand for such type of insurance, which would also lead to the development of agriculture, to the creation of insurance products tailored to farmers' needs) and refers to the authorities that should be appointed to implement these systems.

Keywords: agricultural insurance, expert systems, agriculture

JEL Classification: C80, C88, G22, Q14.

I. Introduction

Since 2007, following Romania's EU integration, Romanian agriculture has been put to heavy trials as it had to meet the challenges imposed by the Common Agricultural Policy. Although, in comparison with European countries, Romania ranks ninth as agricultural area, seventh as arable land, eighth according to the area occupied by pastures and meadows, fourth according to the population engaged in agriculture (Creacă 2002, 23), the impediments that are currently hindering the development of agricultural insurance (e.g. lack of awareness and confidence in insurance, lack of financial means of farmers), entail modest results, despite the significant potential and its importance in the development of agriculture. Thus, due to the fact that modern agriculture can be developed only in the presence of an agricultural insurance system, there is an urgent need to find solutions to promote agricultural insurance products, as both farmers and insurance companies do not show a keen interest in this type of insurance.

Therefore, the following questions arise: Why don't farmers buy insurance? What should be done to change the perception of farmers towards insurance, so as to boost demand for agricultural insurance?

The solution could be offered by artificial intelligence, especially expert systems. Their implementation in agricultural insurance would promote existing insurance products, finding alternatives to farmers' needs according to their possibilities and needs, and allowing for an ongoing improvement of the system as a result of feedback from farmers.

The objective of this paper is to collect data on specific aspects of agricultural, to prepare a knowledge database, to present conceptually a pilot version that will continuously improve based on the farmers' feedback, by showing clearly the collected data which would lead, through their processing, to the most relevant results.

(Ganesan 2006, 263) believes that agricultural production has evolved into a complex business requiring the accumulation and integration of knowledge and information from many diverse sources. Unfortunately, agricultural specialist assistance is not always available when farmer needs it. In order to alleviate this problem, expert systems were identified as a powerful tool with extensive potential in agriculture.

II. Literature Review

Expert systems have started to grow in importance lately, covering all areas of economic and social activity, with the role to collect data from human experts on various aspects in order to assist the user in the reasoning necessary to solve problems, at levels of expert performance, making available to him the acquired knowledge and experience.

The expert system is a software program that incorporates a particular knowledge database and an inference engine. The program acts as an intelligent adviser in a particular area (Frenzel 1987). It is a system that uses human knowledge captured in a computer program to solve the problems that usually require human expertise (Turban, Efraim; Aronson, Jay 2001).

The goal is to offer a solution to a given problem; the expert system must take a decision in this regard. For example - in this period, which is the insurance type that corresponds to the current features of the agricultural production and to the financial means of the farmer?

The ideal expert system first makes use of simple questions and rules to infer more complex knowledge. The system would be self-defensive if, instead of asking simple questions at first, would ask questions that require specialized expertise (Russel and others 1988).

(Trencher 1998, 7) consider that today, a growing number of insurers are using expert systems as a way to improve the quality of human processes - to perform tasks faster, more consistently and with fewer errors.

The main benefits of expert systems are (Turban, Sharda and Delen 2011, 569, 570):

- *Increased output and productivity.* Expert Systems can work faster than humans can.
- *Decreased decision-making time.* This property is important in supporting frontline decision makers who must make quick decisions while interacting with customers.
- *Elimination of the need for expensive equipment.* Often, a human must rely on expensive instruments for monitoring and control. Expert Systems can perform the same tasks with lower-cost instruments because of their ability to investigate the information provided more thoroughly and quickly.
- *Ability to work with incomplete or uncertain information.* Expert Systems can, like human experts, work with incomplete, imprecise, and uncertain data, information, or knowledge. The user can respond with "don't know" or "not sure" to one or more of the system's questions during a consultation, and the Expert Systems can produce an answer, although it may not be a certain one.

- *Provision of training.* Expert Systems can provide training. The explanation facility can also serve as a teaching device.
- *Improved decision quality.* Expert Systems are reliable. They do not become tired or bored. Expert Systems also consistently pay attention to all details and do not overlook relevant information and potential solutions, thereby making fewer errors. In addition, Expert Systems provide the same recommendations to repeated problems.
- *Ability to solve complex problems.*

(Gray 1987) suggested that insurers who have an automated partner generally have a higher probability to succeed in an increasingly complex environment.

While reviewing scientific literature, we found that expert systems are used increasingly more in recent years in agriculture (e.g. *Rice Crop Doctor*, the National Institute of Agricultural Extension Management (MANAGE) has developed an expert system to diagnose diseases and pests for rice crops and to suggest measures for prevention / curing, *AGREX*, the Center for Informatics Research and Advancement, Kerala has prepared an expert system named *AGREX* to help staff called on agricultural land by giving timely and accurate advice to farmers, *Punjab Agricultural University*, Ludhiana, has developed the Farm Advisory System to support agri-business management) (Kiong and others 2005), but we have not found and treated separately agricultural insurance, which would be an incentive to develop agriculture in general and in particular agricultural insurance, because in order to perform a modern agriculture, insurance plays an important role.

III. Research Methodology

The architecture of expert systems consists of 3 basic components:

- the knowledge database : it contains factual and information databases;
- the inference engine: the dynamic component of the expert system, which suggests a possible decision after analyzing the information in the knowledge database. Many expert systems are equipped with the ability to explain to the user **why?** and **how?** they have reached the chosen solutions through their reasoning;
- the user dialogue interface - the component which ensures the dialogue between the user and the computer in an exciting and comprehensible way.

Assuming the use of expert systems in agricultural insurance, we will present hereafter, in a simplified way, the steps that should be followed in building the system to generate the best option of crop insurance for one's needs.

Preparing the Knowledge Database

In order to prepare a more complex knowledge database to be included in the system, one needs to use official documents or diagrams, using specialized information from both agricultural insurance experts and experts from related fields (veterinarians, agricultural consultants, agricultural equipment suppliers, seed suppliers).

Expert systems cannot be designed without the support of a group of experts. An appropriate expert should have extensive knowledge in the field and good communication skills (Turban, Sharda and Delen 2011, 566).

Preparing Charts

Crop insurance, viewed from the perspective of expert systems, consists of multiple first-hand levels (Fig. 1). Each level is an integrated set of sublevels. For example, the "insurance risks" level includes the following sublevels: hail, frost (late spring frost, as well as early autumn frost), torrential rains, storms, hurricanes, tornadoes, landslides of cultivated land, fires caused by natural lightning (thunder, lightning), from which the farmer will choose one according to his needs.

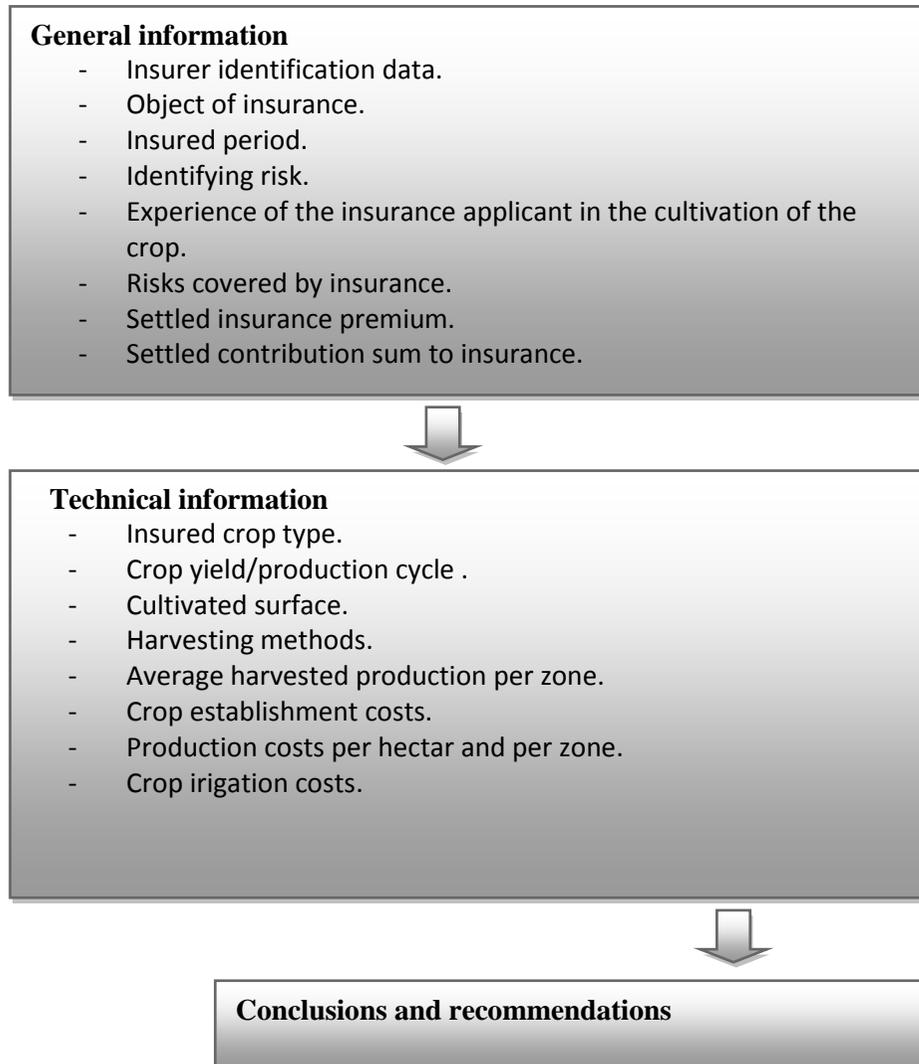


Figure 1: Agricultural insurance chart within expert systems
Source: compiled by the authors

If the reasoning is well done, it translates into the system by IF, THEN rules, which are meant to generate, at the end of the logical algorithm, the best solutions for the user (the farmer). For example: **if** there is a high probability of thunderstorms during the production cycle and **if** the required premium for the risk insured is accessible (within budget), **then** the farmer will subscribe to an insurance contract.

We opted for a simplified schematic representation (on a single level) of a possible expert system for agricultural insurance expert for a better understanding of its functioning, where the system informs the user about existing insurance conditions and provides an alternative, depending on the options chosen.

Encoding and Assessing the System

After choosing a suitable tool, (the most popular is the Corvid system), our attention turns to encoding the knowledge database. A major concern at this stage is whether the encoding process (definition of variables, building logical blocks and command blocks) is properly and effectively managed, to avoid errors. Regarding the assessment of the system, it involves both verifying (by ensuring that the knowledge database contains data acquired from experts and that there are no errors in the encoding phase) and validating the system (by confirming that the system works properly).

IV. Research Results

After observing the necessary steps followed by expert systems, one can easily notice the efficiency of implementing artificial intelligence in agricultural insurance, given that the main benefits are offering the right information to farmers, as well as high quality insurance products tailored to the farmers' needs.

Using expert systems in agricultural insurance would help develop the agricultural sector, bringing both immediate benefits and on the long term because they could track the farmers' behavior over time, their aversion to risk, as well as the frequency and intensity of risks in various regions, and could thus lead to the creation of improved insurance products that meet farmers' needs. These new and improved insurance products would address the different types of risks specific to agriculture, and their expansion to cover the all the farmer's assets is likely to sustain over time the development of this sector and maintain financial flow in agriculture.

The successful implementation of expert systems in agricultural insurance depends on properly understanding the importance of this system, on the availability and capacity of insurance companies to support this area and on the involvement of the Insurance Supervisory Commission and the Ministry of Agriculture.

Although it deals with the topic at a conceptual level, our research moves on to an attempt to present the necessity and importance of implementing expert systems in agricultural insurance as a solution for developing the Romanian agriculture sector because insurance plays a significant role in stimulating investments in agriculture and stabilizing farmers' income.

V. Conclusions

The agriculture of a country may be endangered by the weather which can not be controlled only to a limited extent and which can have major impacts on production achieved. The presence of risk in agriculture is a challenge, particularly for small farmers who are not used to insurance. (Johnson and others 1993, 35-51) showed that many farmers estimate incorrectly the probability of loss and may not correctly predict if an insurance contract is appropriate for them or not.

The implementation of expert systems in agricultural insurance would be an incentive for the development of both agriculture and agricultural insurance, because so as to perform a modern agriculture, it is necessary to maintain funding opportunities under the exact conditions required by the characteristics of the agricultural production. In this respect, the use of expert systems in insurance is a crucial tool for protecting agricultural producers and farmers. That is why the agriculture sector must be developed, especially that lately new risks have arisen as a result of climate change.

Applying expert systems technology in the agricultural insurance is as necessary as it is useful due to the fact that it provides information to farmers about the existing insurance products and it reproduces the reasoning of human experts in a comprehensible form, so that users, regardless of their level of knowledge, can decide which one best suits them at that time.

Despite the importance and necessity of expert systems as an alternative for development of agriculture and agricultural insurance, the implementation of such a system is delayed because of

the lack of involvement of insurance companies and regulatory authorities in the field (Supervisory Insurance Commission and the Ministry of Agriculture).

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THE EVOLUTION OF FISCAL INDICATORS IN THE LAST YEARS IN ROMANIA

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Tax revenues are an important part of budget revenues, and their structure represent the mirror of government's fiscal policy. Also their level and structure reflects the evolution of the economy in general. The evolution of tax revenues has been influenced by the financial crisis of this period. The tax revenue structure in Romania is characterized by relatively high share of indirect taxes revenues in comparison with another European Union states, where the share of revenues from direct, indirect taxes and social contribution is relatively close.

Government expenditure is vital for the economy especially if they are focused on productive areas. They are the engine of economic developments and plays an important role in raising the standard of living of population in a state. In the last years, the growth rate of public expenditure was higher than the trend of tax revenues increase. Sizing revenue and public expenditure is essential for achieving the budget balance target and to meet the criterion stipulated in the Stability and Growth Pact. According to the Pact, the budget deficit may not exceed 3% of GDP. This development asymmetric led to increased deficits in the last years.

The high level of structural deficit has canceled an initiative to tax relaxation in this recession period. The need for fiscal consolidation has been paramount in the context of chronic deficit and difficulties faced in financing it. The opportune solution to finance the high public deficit and to achieve the objective of financial stability of the economy was contracting of public debt from International Monetary Fund. Other measures to reduce the deficit were the reduction of public expenditure and increasing tax revenues.

We propose in this paper to analyze the evolution of fiscal indicators in comparison with the evolution of macroeconomic indicators to capture the reaction of taxpayers and economic environment at measures adopted.

Keywords: fiscal, tax, fiscal revenues, budget, financial crisis

Coduri JEL: E60

I. Introduction

The importance of fiscal policy of a state budget is derived from the impact that it manifests on the main macroeconomic indicators which reflect progress through economic growth. The fiscal –budgetary policy must be linked to macroeconomic policies and support macroeconomic stability objective. The main objectives of fiscal-budgetary policy are to stimulate the economic activity, rising living standards, fiscal consolidation, promotion of countercyclical fiscal policies. The mirror of fiscal-budgetary policy is a state budget, which includes destinations of financial resources and their sources of funding. Some authors considers that budgetary policy represent the concept and actions of government for public revenue and expenditure, the means to raise revenue, the types and size of expenditure which can interfere in the stabilization and economic recovery(Dobrotă N 1999:354). Although the architecture of revenue and expenditure depends

from economic priorities of a state, it must adapt to situations at a time. Through the budgetary policy is reflected the efficiency of public expenditure use and management and the allocation of financial resources. The level and structure of public revenue and expenditure reflects the main trends, directions for action in a state economy. So do not neglect “the important role of policies and budgetary levers in the modern economy”, like it is highlighted by Constantin Tulai professor(Tulai C. 2007:68). Fiscal policy offers the main tools which is used by the government to influence the economy through changes in taxation level or public expenditure adjustment. Fiscal policy plays an important role in mitigating the economic cycle. According to several experts which we subscribe too, the effectiveness of fiscal policy is reflected by its role of stabilizing the economy. Thus, we can say that the optimal tax policy is acting to mitigate the amplitude of business cycle fluctuations, that in periods of recession adopt a lax behavior and in the expansion periods a more restrictive behavior. An important indicator by means of we can estimate if the fiscal policy performs the stabilizing role is the structural deficit. The structural deficit shows how many from the fiscal-budgetary position level reflected through taxes, transfers, expenditure due to economic conditions and how many due to fiscal policy decisions taken. The analysis of this indicator reflects the sustainability of fiscal policy.(Raport anual: Evoluții și perspective macroeconomice și bugetare 2011: 23-24)

By the side of monetary policy, fiscal policy has an important role in the general economic policy objectives. While monetary policy acts on short-term, the effects of fiscal-budgetary policy is outlined in a medium or long time horizon. However the objectives of the two categories of economic policies must be linked.

In the context of Romania integration into the European Union, another concern is adapting the fiscal-budgetary policies to EU requirements. Optimum sizing of public revenue and expenditure is essential to achieve budget balance and to respect the objective criteria laid down in the Maastricht Treaty. According to the Treaty, the budget deficit must not exceed 3% of GDP.

The current financial crisis has exposed some weakness of fiscal budgetary policy direction of Romania that pro-cyclicality. Thus, in the context of excessive growth in the budget deficit in Romania is necessary a budgetary and fiscal consolidation. A growth model based on debt and increase investment in housing and consumer sector, high budget deficits have required fiscal consolidation efforts.

II. The evolution of main fiscal indicators in period 2000-2010

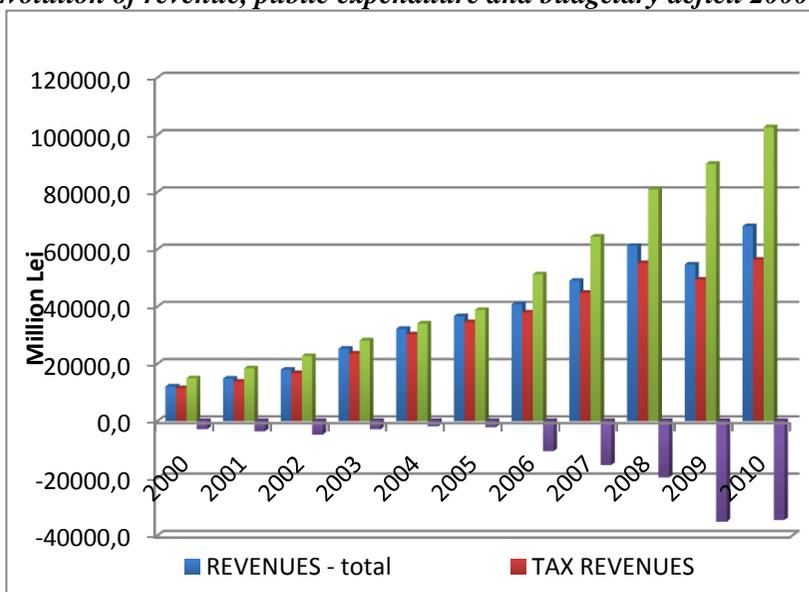
Procyclical nature of fiscal and budgetary policies of economic growth before the financial crisis, canceled fiscal space to stimulate the economy during the recession claiming the need to reduce high budget deficit during the crisis and maintaining pro-cyclical fiscal and budgetary policies. Although Romania is the country with the highest GDP growth in Europe but in the short term this situation marks a number of uncertainties about the outcome of the deep financial crisis(Raport privind situația macroeconomică pentru anul 2009 și proiecția acesteia pe anii 2010-2012: 8).

Analyzing the revenue and expenditure in the period 2000-2010, we notice a trend of growth, but it is noticeable that since 2006 public expenditure growth has outmatched the strong growth trend of public revenues. The share of public revenues in GDP in the period 2008-2010 is situated between 32.2% and 32.7%, while the share of expenditure in GDP have been growing larger, ranging between 37-39, 5%(Ministry of Finance - *Raportul la proiectul Legii bugetului de stat pentru anul 2011 și orizontul 2012-2012:9*).

This development resulted in an exaggerate increase in the budget deficit. Unlike other European Union countries (Ireland, Belgium), where the excessive budget deficits growth is due by measures adopted by national governments to support the banking system, in Romania the budgetary deficit is determined by two main factors: the dramatic loss of budget revenues caused

by the GDP collapse and the structural deficit accumulated by Romania before the starting of financial crisis. If in the period 2001-2007, the budget deficit was fitted within the limits set by the Maastricht Treaty, since 2008 the share of budget deficit to GDP has significantly increase about 5.7% from GDP, exceeding far the permitted threshold of 3 % of GDP. Fiscal adjustment measures aimed primarily efforts to increase tax revenue by increasing the VAT rate with 5%. On the expenditure side, efforts were directed towards a reduction in salaries of public sector, complemented by reducing the number of employees, a decrease of 15% of most social benefits and reduce spending on goods and services by 10%.

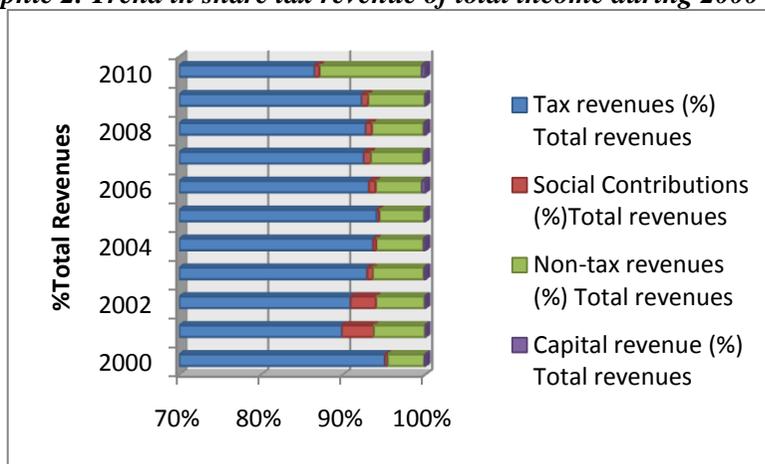
Graphic 1. Evolution of revenue, public expenditure and budgetary deficit 2000-2010



Source: Ministry of Finance- www.mfinante.ro

By the side of public revenues, Romania is the state with the lowest share of budgetary revenues in GDP (32.4% of GDP in 2009), in comparison with other European Union countries, with about 11% lower than the EU average. Also the share of tax revenue to GDP is below the EU average. Analyzing chart below we notice a downward trend in the share of fiscal revenues in total government revenue, emphasizing in the period 2009-2010. This evolution is certainly due to the economic slowdown and GDP downward during 2008-2009 period. Reducing the share of tax revenues in total revenues during 2009-2010 budget is offset by an increase of share of non-tax revenue in the total income.

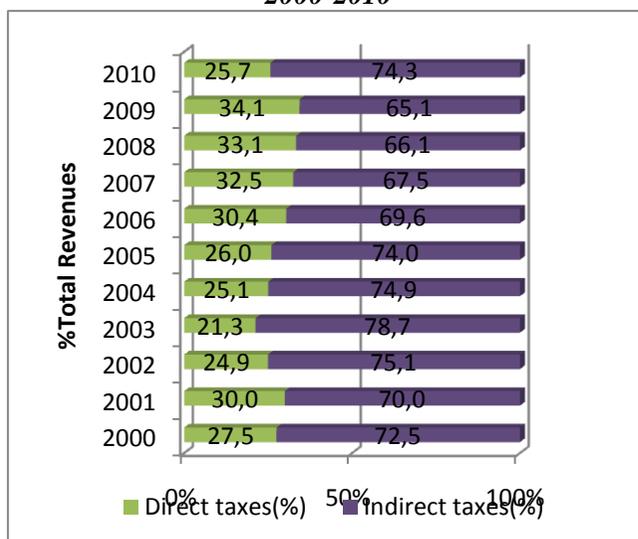
Graphic 2. Trend in share tax revenue of total income during 2000-2010



Source: Ministry of Finance- www.mfinante.ro

The tax revenue structure in Romania is characterized by relatively high share of indirect taxes revenues in comparison with another European Union states, where the share of revenues from direct, indirect taxes and social contribution is relatively close. Although the share of direct taxes fluctuate between 20% and 30% of fiscal revenue in the reviewed period, it is lower in comparison with the share of tax revenues from indirect taxes ranging between 65% and 80%. Analyzing strictly period 2007-2009, we can observe that the revenue from indirect taxes knows slightly downward trend from 67.5% in 2007 to 65.1% in 2009. The orientation of revenue from indirect taxes change in 2010, when an increase of almost 10 percent record compared with 2009. This development is due to austerity measures adopted by the Romanian government among indirect taxes in response to IMF conditions, namely increase in VAT rate from 19% to 24%, gradually increasing excise.

Graphic 3. The share of direct tax and indirect tax revenue to the formation of tax revenues 2000-2010

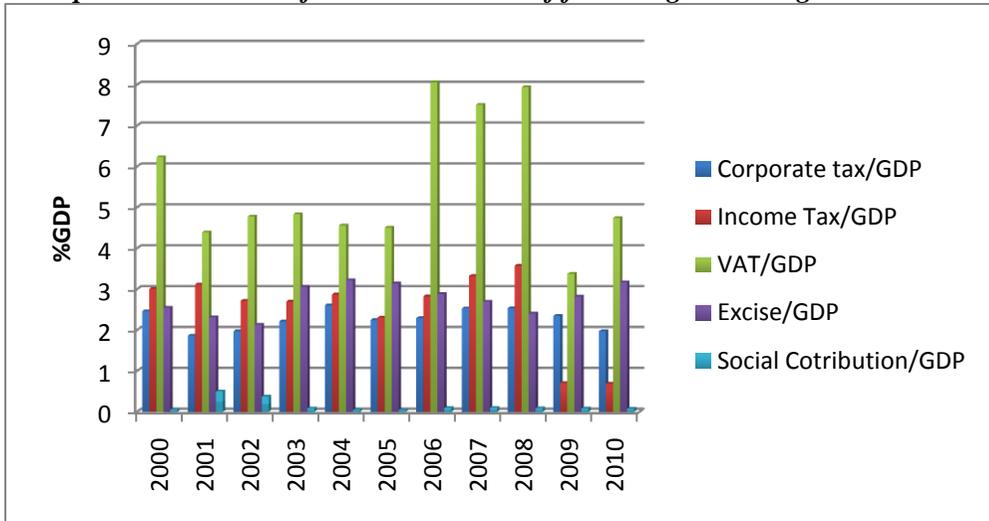


Source: Ministry of Finance- www.mfinante.ro

Analyzing the main categories of sources of revenue: income tax, VAT, excise duties and social contributions can be seen that the largest share is held by value added tax, culminating in 2006 recorded values (8.05% of GDP), 2007 (7.5% of GDP) and 2008 (7.9% of GDP). There then follows a collapse in 2008-2009 of VAT receipts. Then follows a collapse in 2008-2009 of VAT receipts. Since 2010, the revenues from VAT has resumed the ascendant trend as a result to measures taken by the government: the increase in VAT from 19% to 24% by OUG 58/2010 to achieve a balance between revenues and expenditures, where the income were strongly affected by the financial crisis. Government has taken this measure to increase the VAT rate to achieve the objectives of fiscal policy commitments agreed in the bilateral funding agreements concluded with the International Monetary Fund, the World Bank and European Commission. In comparison with the revenues from value added tax, excise revenues are not aware such asymmetric developments in the analyzed period. A slight decrease in revenue from excise duty in 2008 with slight recovery observed in 2009. The slight increase in excise revenue due to the increase of excise duty applied on 1 January 2010 for cigarettes, electricity, heat and gas, to achieve the minimum level required by Community legislation, the increase of the average rate RON / EURO considered at the computation of excise for 2010 and increase the amount of duty on some products. In order to study the impact of fiscal changes on the macroeconomic indicators we can say that measures to increase the rate of VAT and excise duty levels had a negative direct effect of inflation growth in Romania. As regards direct taxes there are high differences among the income taxes, a decrease of approximately 3% of GDP in 2009 compared with 2008. Since may 2008, receipts from corporate income tax recorded a slight decrease. Decreasing receipt from direct taxes is determined mainly by decline of household income and the level of profits as a result of financial crisis. Measures taken by the Romanian government in order to income tax to restore the balance between revenues and public spending was temporary introduction of the minimum tax in April 2009. From the analysis of changes in tax receipts we can observe that the measure do not provided higher receipts from this source, the effect was rather gap mitigation. Social benefits also know a slightly downward trend. The share of social contributions to GDP is steadily falling since 2006. This development is the result of gradually implementation of pension pillar II, which involves targeting gradual shares of social security contribution rate by a private pension fund to invest. Gradually implementation of the pension pillar II is achieved by increasing the share of social contributions redirected from 2.5% to 3% in 2010. In order to restore balance in the public pension system have been adopted reforming measures which include: raising the standard retirement age, increasing the number of those taxpayers with income from professional services, managers, discouraging the number of early retirement, early partial and unfair disability retirement, the expansion base for social contributions.

Overall we conclude that the financial crisis effects have been evident since the end of 2008, resulted in a strong decline are the main sources of financing state budget.

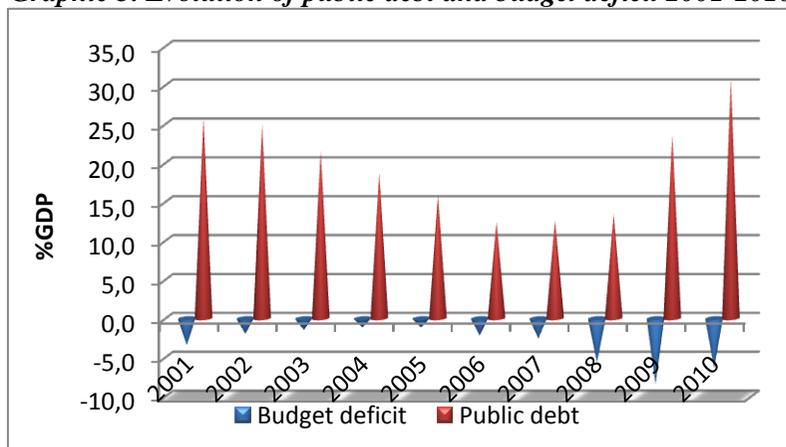
Graphic 4. Evolution of the main sources of financing state budget 2000-2010



Source: Ministry of Finance- www.mfinante.ro

In terms of economic contraction and the budget deficit financing needs in 2008 (5.7% of GDP), Romania's public debt increased. The optimal solution for financing, the high deficit and debt refinancing, respectively to achieve the objective of financial stability of the economy was contracting of public debt from the International Monetary Fund (Mara Eugenia Ramona, Inceu Adrian, Cuceu Ionuț, Achim Monica Violeta 2005: 5). Increasing public debt growth is due mainly by the increasing of government debt, local debt remained constant. The structure of government debt shows that public debt contracted directly by the state is about 90% of the total public debt and debt guaranteed by the state government is about 10% of the total. (privind situația macroeconomică pentru anul 2009 și proiecția acesteia pe anii 2010-2012: 30). Analyzing the public debt by the currencies in 2010, we can observe the most important component is the Euro (44.1%), followed by national currency (43.5%), while other currencies have only 12.4% of total debt government. High share of debt in euros due to the hiring of loans in euro, both domestic and foreign. Romania's public debt has increased significantly in the last two years, reaching the 2010 level of 30.8% of GDP, which is well below the ceiling imposed by the Maastricht Treaty of 60% of GDP.

Graphic 5. Evolution of public debt and budget deficit 2001-2010



Source: Eurostat

III. Conclusions

Through the financing agreements concluded with the IMF and the European Commission, the Romanian government has assumed an adjustment program to reduce the general government deficit at 4.4% of GDP for 2011 of 3% in 2012, and most adjustment measures are already in force. This further implies keeping under control public spending and the elimination of discretionary fiscal policy measures affecting the revenues.

In conclusion we can say that Romania's fiscal policy should remain a conservative, restrictive towards the goal of fiscal consolidation.

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PRINCIPLES AND PROCEDURES ON FISCAL

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Fiscal science advertise in most analytical situations, while the principles reiterated by specialists in the field in various specialized works

The two components of taxation, the tax system relating to the theoretical and the practical procedures relating to tax are marked by frequent references and invocations of the underlying principles to tax.

This paper attempts a return on equity fiscal general vision as a principle often invoked and used to justify tax policies, but so often violated the laws fiscality .

Also want to emphasize the importance of devising procedures to ensure fiscal equitable treatment of taxpayers.

Specific approach of this paper is based on the notion that tax equity is based on equality before tax and social policies of the executive that would be more effective than using the other tax instruments.

I want to emphasize that if the scientific approach to justify the unequal treatment of the tax law is based on the various social problems of the taxpayers, then deviates from the issue of tax fairness justification explaining the need to promote social policies usually more attractive to taxpayers.

Modern tax techniques are believed to be promoted especially in order to ensure an increasing level of high efficiency at the expense of the taxpayers obligations to ensure equality before the law tax.

On the other hand, tax inequities reaction generates multiple recipients from the first budget plan, but finalities unfair measures can not quantify and no timeline for the reaction, usually not known.

But while statistics show fluctuations in budgetary revenues and often find in literature reviews and analysis relevant to a connection between changes in government policies, budget execution and outcome.

The effects of inequality on tax on tax procedures and budgetary revenues are difficult to quantify and is among others to this work.

Providing tax equity without combining it with the principles of discrimination and neutrality in the tax to ensure an objective of fiscal policy.

Keywords: fiscal science, the principles of taxation ,fiscal, tax, fiscal revenues, budget, crisis

Coduri JEL:H20

Imposition of the theoretical principles of science is tax procedures such as the practical form of taxation, the latter being comprised of specific operations taxation.

The principles, generally, there are rules, customs, descriptions or definitions accepted in time by repeating to their individualization as dedicated as such time.

How the tax is an important part of social life, from ancient times it was a high regulatory component level in different periods in the evolution of society.

Feeding practices are emerging as national budgets techniques quite late, we can say that the great empires like the Roman Empire, Byzantine Empire or state organizations during the later

Middle Ages and especially in modern times have used techniques that have evolved time, so to speak in contemporary modern tax procedures and techniques.

Although ways to attract financial resources from state treasures states or organizations have the same economic content, however, different forms from country to country while also differed. But the great thinkers and especially classical political economy, Adam Smith precursor fails to define the rules governing the taxation process more objective to be achieved, namely in the form of imposing peaks.

Maximums were imposed along the remaining time and raised in the special cases in the literature so far is talk of three groups of principles of taxation, namely the principles of fiscal efficiency, fiscal equity principles and principles of economic policy and social.

Principles of taxation yield based on the idea that taxes should be placed so that it brings maximum revenue with minimal state expenditure, in other words, is characterized by productivity. Productivity in turn is an indicator that expresses the efficiency, and in this case is also a feature of the tax cost.

As an indication, in general, productivity expresses the ratio between results and effort, and if taxes this indicator is the ratio between tax revenues and state efforts to attract them, in fact, tax administration costs.

These costs are quantified and the fiscal system can be determined, in fact, are the fiscal costs of maintenance. We know that if indirect taxes tax procedures involve a higher tax payers in the process starting with maintenance records purchases and sales, continuing with the calculation of taxes, their declaration and of course their pay.

The participation of contributors to the tax administration requires an effort on their part and savings from the tax authority.

It is interesting to determine the involvement of taxpayers in the administration of taxes and how constitutional law is the imposition of tax by taxpayers that they were required to maintain records on tax and other obligations, such as declarations on a particular type of data carrier, or the obligation to submit and maintain certain records prior accounting and other information related to trim taxes otherwise.

On the other hand in case of direct taxes is based on a fiscal apparatus restricted participation of taxpayers, meaning that taxes on buildings, land, vehicles, tax on personal income from independent activities carried out by the retained the source of rents from agricultural activities and other with the end of regulation, the unit tax on the taxpayer prepares the tax statement, enforceable document, it will be followed to the collection of amounts assessed.

If the profit tax, income microenterprises, dividends and others taxpayer tax return and calculate the actual tax. And if those indirect taxes and direct tax authority has the right and obligation to control activity for each tax separately .In this context we can say that indirect taxes are more profitable than direct taxes.

Tax return is influenced by the level of accuracy of tax law, if it allows or not or if you fraudulent tax evasion against the law even if it is located that you do not leave room for interpretation. If the tax is paid by all taxpayers who have taxable same table, it is characterized by universality, quality tax cost.

So we know that in fact violated tax laws are fraudulent or are bypassed by the taxpayers, so that part of planned to collect tax revenues do not reach the collection. Level budget tax revenue is a function and device performance fiscal control, the device should be based on tax laws and procedures of tax control equivocal performance.

The level of failures to receive is not equal to the degree of tax evasion primarily because we do not know if the planned revenues are well grounded and if he can not evolve as macroeconomic indicators once assumed the public budget planning.

The most important problem of collecting the fraudulent evasion of taxes is an important topic as complicated as it is.

In the literature often talks about avoiding the tax law on an escapist phenomenon without breaking the law, called the fraudulent evasion.

In this context I put my problem reporting escapist content phenomenon, if we refer to tax law, if we refer to planned tax revenues or the principle of universality of taxation. In the first case the tax law is not broken, so in terms of jurisdictional comparison is pointless.

Reporting on planned tax revenue does not generate an eloquent comparison to the process of planning can be faulty and so the comparison suffering. Remains third comparison, the principle of imposing, this principle can be violated, in which, however, does not violate law rule than universally accepted.

I personally, not breaking the law does not accept such employment, considering honest trader and indicates those interested in just talking about tax evasion, fraud phenomenon par excellence. Principles violation of universality, a principle is violated continually bare fact, primarily affecting profitability and return on any taxation can be no question of tax fairness.

A tax and cost is characterized by stability, a tax that must be seen as two spots of view, namely, the stability of the tax law and tax revenue stability. Stability of resistance translates into tax law tax law in time, which means that the law would be well located and comprises all the details required in the tax case.

Cash inflows fiscal stability means that when tax rates change and change proceeds in the same way. It is said that excise taxes are stable so that when tax rates rise and increase revenues.

If these taxes are apparently betting heavily on the psychological factor of about certain flaws in the case of alcohol and tobacco, the habit if auto fuel.

Another quality of taxes, namely the imposition of convenience, in fact one of the maxims of taxation, taxation with fairness, certainty of imposition of taxation and economic qualities, put forward by Adam Smith, can be considered a necessary feature cost taxes, and contributing to increasing the collection tax revenue.

Fairness is a principle of taxation often invoked in literature, but it seems the most difficult fiscal respected in practice. Fair treatment for all taxpayers from the tax authorities is a goal difficult to achieve in practice in tax and general appropriateness societate. Totusi promotion, discrimination and neutrality to the tax authorities may result in equal treatment from the tax law.

Equality before the treasury can be absolute when the taxpayer owes an equal amount of Tax expressed in absolute terms, or may be relative when the taxpayer owes a relatively equal nsuma expressed in relative numbers, in percent, this is the proportional share.

In time, when economic and social life to sophisticated and revenue obtained from various sources the question of contributory capacity taxpayers, taking into account their economic situation, their social, family, their health status and other variables to justify differential treatment to the tax authority, in other words one that can pay more to do.

They rely so under the influence of leftist thought after the French Revolution to provide income tratamentulechitabil public increasingly larger.

The literature talks about horizontal equity and vertical equity on, the evolution of the concept of tax fairness.

Treatment involves horizontal comparison income of two or more persons get equal pay but from different sources, and if vertical equity is to compare the incomes of two or more different persons who earn income from the same source, context in which Professor Constantin Tulai in his "Public Finance and Taxation" highlights the risk of such comparisons, in fact beneficial to

express report with the taxpayer, to transfer the emphasis on gender equality before tax through tax .

Time evolution of the concept of tax equity reflects the intent to transfer treasury importance to gender equality through taxes or tax reports, obviously in financial purposes. Accepting equality through taxes, accept and practice invasive in terms of tax authorities, tax policies are used exclusively for government.

Of course many of our peers need government help because of illness, because of family and of course other reasons that they need help in different ways. In this context, however, we must ask ourselves whether such interventions for social purposes to be promoted through taxes or using other levers.

It is obvious that if the executives involved in the tax account, the first result is that it distorts the acceptance address, that the official intention of the taxpayer and those who do not enjoy such tax benefits conferred will try to bypass the tax law.

I think for social interventions can be promoted through other means, such as state social insurance systems, at other institutions of social protection for the taxpayer and not to confuse the proper push other adverse judgments propriety, and labor market competition capital and ultimately to tax evasion.

On the other hand and tax procedures are hampered and will suffer in terms of efficiency and their bureaucratic phenomenon, by appealing to all sorts of supporting operations to access tax advantages or disadvantages for others put in the work of contributors.

The third group of principles of taxation are those that concern economic and social policies. Taxes are the main source of revenue for the state, but a tool, an effective lever to influence consumer. Principles taxpayers in their capacity as neutral taxation, the tax discrimination, lack of arbitrariness, impersonality and the legitimacy of taxes.

Use taxes in their capacity as leverage requires diversifying financial operations tax procedure.

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NOKIA PERFORMANCE AND CASH FLOW ANALYSIS

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In this paper the author presents the ways to analyze the performance of the company Nokia. Thus based on a system of indicators are highlighted the key situations that emphasize performance, namely: operational activity, financial balance, cash flows.

Keywords: net sales, gross profit, ROE, ROA

JEL Classification: G32

1. Introduction

Nokia is a consumer led company. There is a progressive and continuous increase in consumer involvement with technology and communications globally. People are broadening their modes of communication to include the web, and social networks are becoming central to how people communicate.

People want to be truly connected, independent of time and place, in a way that is very personal to them. And, Nokia's promise is to connect people in new and better ways.

Nokia's strategy is to build trusted consumer relationships by offering compelling and valued consumer solutions that combine beautiful devices with context enriched services.

2. Method and Results

Analyses of financial performances are based on the income statement. The most important indicators in this process are presented bellow.

- **The net sales** increase year by year with around 20%, the net sales have encountered good values.

- **The gross profit on sales** is influenced by sales and also by cost of sales. Because of the increase in both elements, the increase of gross profit on sales is not the same as for the net sales, so in the first year is only 12% meanwhile in the second it gets to 29%.

- **The operating income** is related to gross profit and also other expenses like those for research and development, selling and marketing expenses and also the general and administrative expenses. These expenses encounter an increase every year, the situation being influenced by the amount of each modification, so the encountered operating profit gets higher and higher every year.

- **The profit before taxes** has almost the same shape as the operating income. Also this is influenced by the financial results which are separated into those related to share of results of associated companies and those related to financial income and expenses.

- **The net result** is materialized during all the period in growing profits but is differentiated from one year to another. Thus in 2009 is a normal increase of around 20%, while in 2010 we have a bigger increase of financial profits by almost 70%.

In order to determine a company's profitability and efficiency, the main indicators used are the ones presented in the Table no.1.

Table no.1 Operating ratios

OPERATING RATIOS	2008	2009	2010
ROA	20.66%	24.26%	21.24%
ROS	13.57%	13.35%	15.64%
Assets Turnover	152.28%	181.81%	135.80%
ROE	28.90%	35.70%	41.56%
Inventory Turnover	-	17.22	15.24
Account Receivable	-	7.32	5.98

2.1. Return on assets (ROA), Return on sales (ROS) and Return on equity (ROE).

The profitability ratios relate the company's income to bases such as assets, sales or owners' equity. The first one's evolution is a complementary one, ROA encountering an increase in 2009 and a decrease the year after, while in case of ROS, it's exactly vice-versa, in 2009 it's going down and one year after it's going up, although the modifications are not significantly. Less favorable developments of ROA and ROS are caused by the following factors:

- a higher increase in total assets, in 2010, compared with the increase in the operating profit;
- lower growth in operating income compared with the sales' growth, in 2009.

The evolution of ROE is a positive one, higher and higher from one year to another, indicating a good efficiency of capital for shareholders.

Inventory and Assets Turnover.

A higher increase in the company's inventories generates a decrease of the Inventory Turnover in 2010, while a big growth of total assets in 2010, much higher than the one in sales leads significant to a decrease in Assets Turnover.

2.2. Financing Ratios

Financing ratios reflect the capital structure of the firm and are widely used by investor analysts in assessing the potential risks and returns related to the firm's debt and equity securities.

Liquidity and Solvency

From the liquidity point of view we can observe that the company is more than able to pay its short-term debts at maturity, even though its liquidity is lowering, both in terms of current ratio and quick ratio. The decrease is the result of the major increase in current liabilities, up to 86% in 2010. In terms of solvency, the ratios are increasing during the years. The first one indicates that over the years approximately 48% of Nokia's capital is financed from borrowed funds.

Equity Ratios

Equity ratios are used in common stock valuation and in the assessment of stock risk. Earnings per Share increases over the followed period, reaching 1.85% in 2010, more than double from the first analyzed year. Market value per share increases its value in 2009, the next year being characterized by a high reduction, reaching a level under the one from 2008. This ratio reflexes a market value of the shares at least eleven times higher than the book value. The dividend per share registered growth in the last year even if it's just a small one.

Growth rates are computed as average annual rates of growth over time periods. All ratios are increasing over the years, the assets encountering the highest raise in 2010 compared with 2009, (66%), followed by the earnings with 55%, in the same year.

Other Ratios

One of the most important indicators in this category is the Price to Earnings ratio (P/E), which in our case is having a sinusoidal evolution, with an increase in 2009, followed by a decrease in 2010. The ratio indicates a lower confidence of investors in Nokia's stocks in 2010, when their value is decreasing.

2.3. Analysis of Cash Flow Statement

Cash flow is the balance of the amount of cash being received and paid by a business during a defined period of time, sometimes tied to a specific project. In constructing its cash flow, the company Nokia uses the indirect method. The three-year data in Table no.2 presents the activities which provide cash flows for the company, activities divided into operating, investing and financing. The most important activity that brings money into the company is the operating one, while the financing activity is the most expensive one, the result over the three years being a negative one, but in decrease. Over the studied period, the amount of cash in the company is increased, in 2010 reaching almost double the value from the beginning of the year.

The table below underlines the indicators most used for correlations between cash and shares.

Table no.2 cash flow indicators

Cash flow indicators	2008	2009	2010
Cash flow per share	0.001	0,001	0,002
Free cash flow	2524	2837	5996
Cash flow from operations (CFOT)	135.51%	127.04%	115.07%
Cash flow from operations (CFOD)	15.46	11.31	6.13

From this table, it can be observed that the cash flow per share is approximately the same during the three years, with a slightly increase in the last one. The cash flow from operations represents at least 115% of the cash flow entered into the company and a level of 135.51% in 2008.

Some correlations between loans and cash flow from operating activities are made in order to evidence the influence of borrowings on company's cash.

3. Conclusions

Over the three years, Nokia has encountered a general ascendant evolution regarding all main financial elements – assets, owners' equity, the company's solvency, as well as the in terms of money that entered the firms accounts. The company's leaders developed it and added value through proper management of heritage, increasing the goodwill at remarkable levels. The financial results for Nokia are bringing profit every year both from operating activities as well as investment activities.

As strengths, it can be mentioned:

- a favorable situation regarding liquidity and solvency ratios;
- very low short-term borrowing;
- earnings, assets and sales growths positive;
- increase in sales and a reduced increase of the costs of sales.

In terms of weak points, the company could make substantial improvements, most important being:

- increasing the speeds of rotation for assets regarding the inventories and accounts receivables;
- reduce its long-term indebtedness, to move the financial result on plus.

Taking into consideration the history of one and a half century of Nokia, period during which it has become the first company in the mobile phone business, we can say that its stocks can be a profitable investment for the future.

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PUBLIC DEBT SUSTAINABILITY ANALYSIS: EU CASE

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The global crisis has caused a serious fiscal deterioration that leaves the world economy with serious challenges. In many developed markets as well as in a few emerging markets (Emerging markets) public finances have already become, or are at least at risk of becoming, unsustainable. Commonly, public debt sustainability is defined as a sovereign's ability to service debt without large adjustments to public revenue and/or expenditure and without ever-increasing public-debt-to-GDP ratios. Hence, this definition refers to both a country's ability and willingness to repay its debt. We also have to add the fact that there isn't an universal accepted definition of fiscal or debt sustainability.

In light of the growing public debt, the issue of debt sustainability has increasingly attracted attention. In this paper we analyse public debt sustainability scenario in EU economies. At least half of the EU countries will have to implement stringent fiscal consolidation programmes over the next few years in order to prevent already high public-debt-to-GDP ratios from a further significant rise, also the case of Romania. However, drastic fiscal policy adjustment may be not feasible in the short term and hence public debt is likely to grow further.

In some scenarios the public-debt-to-GDP ratio is predicted to soar to 133% in 2020, from just over 100% in 2010. By contrast, nearly all EM countries, including major economies, appear to be well positioned to stabilise or even outgrow their current debt ratios without drastic fiscal adjustment.

Institutional improvements may help European countries to maintain fiscal credibility. In light of the future fiscal challenges, many European governments may introduce new or more effective national debt limits, similar to those put in place in the past with good results by some Emerging markets. Such institutional reforms could help to insulate fiscal policies from political pressure and to anchor financial market expectations.

Keywords: public debt, fiscal policy, fiscal sustainability, GDP, fiscal consolidation.

JEL Codes: H63, H30, H69, H60, H59.

I. Introduction

Most economists, policymakers and international financial institutions called for expansionary monetary and fiscal policies to mitigate the adverse effects of the global crisis. So far, bold and coordinated policy actions have successfully prevented a collapse of the world financial system and the global economy.

Nearly all major developed markets as well as some emerging markets have run counter-cyclical fiscal policies, either via automatic stabilisers or through discretionary stimuli. As a result, fiscal accounts have worsened significantly since 2007 not only in Developed markets but also, though to a lesser extent in emerging markets. Fiscal accounts were hit particularly hard in Developed markets with bursting housing market bubbles as well as in countries with already high pre-crisis debt burdens.

Regarding the average GDP-weighted public-debt-to-GDP ratio in Developed markets and Emerging markets, it is obvious that many governments have moved into unexplored territory over the past couple of years. While the GDP-weighted EM public debt stock climbed to around 44% of GDP in 2009 from just 35% in 2006, the DM debt ratio skyrocketed to around 95% of GDP from less than 80%.

Today, most Emerging markets still exhibit relatively manageable public debt levels. The current EM public-debt-to-GDP ratio is well below its late 1990s high of 55% of GDP. Contrary to Emerging markets, DM public-debt-to-GDP ratios are now higher than they were in the late 1990s, measured both on an un-weighted as well as on a GDP-weighted basis.

Since the turn of the century, public finances have worsened in particular in a few major developed markets, as underlined by the growing gap between the un-weighted (simple) and the GDP-weighted DM public debt-to-GDP ratio. Meanwhile, the gap between the un-weighted and GDP-weighted average debt-to-GDP ratio has narrowed in the EM world, indicating that no major EM has a public debt burden that is significantly above the average level of its peers.

The previous findings indicate that tail risks in public finances, as measured by the relative size of an economy, are nowadays highly concentrated in the advanced world. The nine Developed markets that face substantial consolidation needs (Ireland, Germany, the UK, the US, France, Portugal, Greece, Italy and Japan), account for around 85% of the DM sample's total GDP. However, the Emerging markets that are either subject to tangible consolidation needs (the Czech Republic, Hungary, Romania and Poland) or where past efforts to lower high public debt have to continue (Turkey, Brazil, India) account for only 29.8% of the EM's total GDP.

II. Literature review

When analysing public debt sustainability in Developed markets and Emerging markets, it is useful to recall the basic concept of public debt arithmetics. (Eduardo(2005) and Sturzenegger (2002).)

To begin with, the dynamics of debt accumulation can be described in absolute terms as:

$$D_{t+1} - D_t = r_{t+1} \times D_t - PB_{t+1} \quad (1)$$

where:

- D denotes a country's gross public debt stock,
- r captures the real interest rate paid on public debt outstanding, and
- PB represents the government's primary balance, i.e. the government's fiscal balance before net debt interest payments.

The above identity can also be expressed in percent of GDP, which puts the public debt stock in relation to the size of the economy (government's underlying potential tax base):

$$\frac{D_{t+1}}{GDP_{t+1}} = (1 + r_{t+1}) \times \frac{D_t}{GDP_t} \times \frac{GDP_t}{GDP_{t+1}} - \frac{PB_{t+1}}{GDP_{t+1}} \quad (2)$$

After rearranging we obtain:

$$d_{t+1} = \left(\frac{1 + r_{t+1}}{1 + g_{t+1}} \right) \times d_t - pb_{t+1} \quad (3)$$

where:

- d denotes the public debt stock and
- pb the primary budget balance (both in percent of GDP).
- g represents the annual real GDP growth rate.

As shown in equation (3), the current public debt stock depends on the past year's debt stock as well as on today's real interest rate, real GDP growth rate and primary balance. The higher the real interest rates, the lower real GDP growth and the lower the primary balance, the more the

public-debt-to-GDP ratio rises. In other words, strong real GDP growth, low real interest rates and sound fiscal policies (as reflected by primary surpluses) are necessary to avoid ever-rising public debt stocks or to lower public debt to more sustainable levels.

Often it is important to know what primary balances governments have to achieve in order to stabilise their current public-debt-to-GDP stocks under given macroeconomic and financial conditions, i.e. under the prevailing economic growth and interest rates.

It can be shown from (3) that the required primary balance to stabilise the debt-to-GDP ratio, denoted as pb^* , depends on the differential between the real interest rate r and the real GDP growth rate g as well as on the prevailing debt level in year $t=0$:

$$pb^* = \left(\frac{r-g}{1+g} \right) \times d_0 \quad (4)$$

Highly indebted sovereigns may have to achieve more than stabilisation of their current public-debt-to-GDP ratios. Instead, more ambitious fiscal improvements are needed to put public debt dynamics on a sounder footing.

In order to lower the current debt-to-GDP ratio to a target level d^* over the next T years, the required permanent primary balance pb^{**} is given by:

$$pb^{**} = \frac{d_0 \times \left(\frac{1+r}{1+g} \right)^T - d^*}{\sum_{j=1}^{T-1} \left(\frac{1+r}{1+g} \right)^j} \quad (5)$$

III. Methodological framework

In many countries rising public-debt-to-GDP ratios imply the risk of increasing pressure on sovereign financing capacity, creditworthiness and hence ratings. A “positive” shock would be triggered by unexpectedly strong but well-balanced fiscal consolidation. Should economies show signs of a more durable recovery, or – more gloomily – should market and rating agencies’ pressure intensify, such a scenario would not look that far-fetched. But how much adjustment is needed? This depends on the current and desired debt level. As “desired” debt targets we use three different benchmarks:

(1) **Stabilising current debt levels**, as preventing further increases could send a positive signal about fiscal prudence.

(2) **Pre-crisis (2007) debt levels**, to be attained in 5-10 years’ time.

(3) **Prudential public-debt-to-GDP benchmarks** (of 60% for DMs and 40% for EMs), to be attained over a 10-year period.

To stabilise debt at 2011 levels, EM countries – on aggregate – could run a primary fiscal deficit of 1.2% of GDP each year. For the past five years, these countries have run a primary surplus of 0.8%, so the stabilisation of debt appears to be easily manageable. Of course, there are country-by-country differences. Turkey and Brazil, for instance, would need to deliver a substantial permanent primary surplus to stabilise their debt. However, in both EMs the required primary surpluses are largely in line with what was achieved over the last cycle.

In the past decade, DMs ran an average primary deficit of 1.2%. Again, the country-by-country analysis shows significant differences and some silver lining. For example, crisis-struck countries like Spain, the UK and the US could stabilise their 2011 public-debt-to-GDP ratio by running only moderate permanent primary surpluses. Nevertheless, the gap between the primary balance

achieved over the last cycle and the debt-stabilising primary balance indicates that many DM and a few EM governments have to significantly alter their fiscal policy stance. This is also true for countries that could continue to run primary deficits to stabilise debt levels. In Japan, Greece, Slovakia, Portugal, the US, Romania, Hungary, the UK, the Czech Republic, Ireland and Poland (consolidation needs by decreasing size) the debt-stabilising permanent primary balance is at least one percentage point above the average figure of the last cycle.

Lowering debt to pre-crisis levels: here we discuss the permanent primary fiscal balances required to bring current (2011) public-debt-to-GDP ratios back to pre-crisis levels (2007) within five or ten years' time.

Nearly all DMs (16 out of 17, with Switzerland as exception) have to achieve constant primary surpluses of 1-12% of GDP in order to lower public-debt-to-GDP ratios to pre-crisis levels over the next five years. If spread over ten years, the required adjustment ranges from 1-6% of GDP for 13 out of 17 DMs. The consolidation needs are largest in Japan, Ireland, the US, the UK, Greece, Portugal, Slovakia, France, Spain and Germany. This holds true in absolute terms and/or relative to what has been achieved over the past years.

Contrary to most DMs and in line, debt reduction to 2007 levels does not appear challenging for most EMs, according to the average primary balance achieved over the last cycle. The only exceptions are Poland, the Czech Republic, Hungary and Romania. These countries need a tangible improvement on their primary balances to reach their pre-crisis indebtedness.

However, pre-crisis indebtedness is not necessarily a meaningful benchmark for the analysis of debt sustainability. Especially for those countries where the difference between the public debt levels in 2011 and 2007 is small and/or where the pre-crisis debt stock was already elevated, the focus on pre-crisis levels may not show the true sacrifice required to cut public-debt-to-GDP ratios back to more sustainable levels. Thus, we also calculate the permanent adjustment needed on the primary balance to lower public debt to benchmarks considered prudent.

As benchmarks and in line with the IMF's calculations we use public debt- to-GDP ratios of 60% and 40% for DMs and EMs, respectively. Other benchmarks are also perceivable and economic theory offers no widely accepted public-debt-to-GDP limits.

Although the 60% limit for DMs (also part of the Maastricht treaty) has some theoretical justification, it could be considered arbitrary. For EMs we use a limit of 40% of GDP, which is often suggested as a critical external debt limit. At least up to now there are several reasons that support this discount for EMs (e.g. more unfavourable debt structure, higher exchange rate and market access risks).

In a sample only 5 of 17 DMs (Australia, Slovakia, Switzerland, Denmark and Sweden) have public-debt-to-GDP ratios of below 60%. In fact most DM countries, including major economies and most major EMU and EU countries, have debt stocks well above this benchmark. Germany, the UK, the US, France, Portugal, Belgium, Greece and Italy would have to achieve constant annual primary surpluses of 2.5-8% of GDP over the next ten years to reach a public-debt-to-GDP ratio of 60%.

Moreover, the debt reducing primary balances are extremely demanding (with the exception of Belgium and Canada) in relation to past averages. Compared to the last decade these countries will have to improve their primary balances by 2-7 percentage points.

By contrast, in the EM world there seems no widespread need for sharp fiscal consolidation. Nevertheless, fiscal challenges in the EMs should not be underestimated. Within a sample only ten out of 21 EMs have public-debt-to-GDP ratios below the 40% benchmark.

However, compared to DMs the efforts required to reach prudential levels look much more manageable. Only Romania, Hungary, Poland and the Czech Republic would have to alter their fiscal policy stance substantially. However, these EMs enjoy the prospect of joining EMU and hence of migrating to the DM segment. As EMU members they would be able to issue public

debt in a global reserve currency. Thus, the 60% debt limit, well within reach except for Hungary, appears to be a more appropriate benchmark to them.

IV. Results

We want to stress that public debt ratios above 60% (40%) of GDP do not necessarily imply a crisis. Many DMs and Ems have not defaulted despite having borne relatively high debt. However, debt ratios well above these limits and/or on a rising trend certainly increase the risk of market repercussions. At the moment, this applies in particular to DMs. Moreover, the outlook for public debt levels above the 60% benchmark, on the rise and substantially above past levels in a lot of DMs has several implications.

Firstly, record volumes of sovereign issuance will have to be absorbed. This holds true even if some consolidation will be achieved. Thus, regulatory pressure on FIs to absorb this issuance might increase. Moreover, countries with public debt well above benchmarks might suffer from crowding-out effects or may have to accept substantially higher risk premium. Although for some DMs (including EMU members) such risk reprising may be desirable from an economic point of view (i.e. to enforce fiscal discipline), it will complicate the task of preserving public debt sustainability in the short run.

Secondly, the credibility of institutional arrangements like national debt limits in DMs or the EU's Maastricht treaty as well as the Stability and Growth Pact will be under pressure for years.

Thirdly, the fiscal challenges in many DMs may revitalise the longstanding debate on the establishment of ex-ante instruments to deal with sovereign debt problems. Concepts to enforce an insolvency law for sovereign debtors or to establish the IMF as a sovereign bankruptcy trustee (traditionally developed in times of EM crisis) could gain more acceptance. As the design of a potential EMF will have to be part of the current European institutional framework, its design and funding are likely to be partially based on the Maastricht framework. Thus, countries with a public-debt-to-GDP ratio higher than 60% and/or fiscal deficits above 3% of GDP would have to contribute to its funding. The debt target analysis clearly shows that all major EU/EMU members would be contributors for many years. This would help to equip such an institution with adequate capital.

Fourthly, the debt target analysis gives some tentative insight on potential pressures on DM sovereign creditworthiness in the absence of credible consolidation plans along the lines of the sketched requirements. Failure to consolidate could have serious implications for rated quasi-sovereign and private sector entities.

The ultimate bearer of the sketched adjustment costs (e.g. through higher income taxation) is the population, i.e. the electorate of a country. Thus, the quality of policymaking will be crucial in the years ahead. Being aware of this, governments may want to "ring fence" fiscal consolidation from political pressure using (more) effective institutional arrangements such as limits on public indebtedness.

V. Conclusions

In many DMs and a few EMs, one should not forget that expansionary policies mitigated the adverse effects of the global crisis and very likely prevented a collapse of the global financial system and the world economy.

At the moment, it appears that a fiscal exit can take place only gradually. Future scenarios as well as debt target analysis highlight that public debt has become, or is at least at the risk of becoming, unsustainable in many DMs but only in a few EMs. At least in theory, most EMs could afford to run looser fiscal policies, for instance by extending counter-cyclical fiscal policies in order to smooth the fall-out from the global crisis.

Moreover, moderate initial debt levels put them in a relatively comfortable position to stabilise or even outgrow their debt-to-GDP ratios. Only austere and bold fiscal policy adjustments after the worst of the crisis is over, which may lay the foundations for higher potential real GDP growth, lower real interest rates and improved fiscal accounts, would significantly alter the presented public debt dynamics. For some countries the permanent primary balances required to stabilise or even reduce public-debt-to-GDP ratios look very ambitious.

Nevertheless, the required economic and political efforts to consolidate public finances might be much greater than in the past. Overall, medium-term fiscal consolidation is more likely to occur in a supportive macroeconomic environment. During an economic downturn or recession, rising tax rates may not suffice to substantially increase the tax-to-GDP ratio.

Should consolidation fail, policymakers in DMs and some EMs may be tempted to look for other ways to fix the fiscal damage. Either they could tolerate a substantial acceleration in CPI inflation to inflate public debt and/or they risk severe adjustments in the real effective exchange rate. Such adverse scenarios should not be disregarded. The assumption that major macro issues cannot go wrong in the DM world (including EMU) has to be scrapped in the aftermath of the global crisis while this time EM, not DM, economies are the ones in the lead to keep public indebtedness sustainable.

VI. Notes

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PUBLIC EXPENDITURE POLICY IN THE CONTEXT OF ECONOMIC CRISIS - CHALLENGES AND IMPLICATIONS

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Public spending is a key component for both public finances and government financial policy. In this situation, government expenditures are made in direct relation with the results of governance with economic and financial crises and global social welfare of the nation. From this perspective, our article aims to highlight the correlation between public expenditure and budgetary financial and economic crisis and, also, state government responses, anticipating their impact on medium and long term. Also, in the context of the crisis and the concomitant lack of public revenue, we identify the pillars on which to base the budget reduction in public expenditure. The implications of the economic crisis in Romania are analyzed along with proposed measures to be followed by the Government through budgetary fiscal strategy. In relation to the purpose and objectives of the research, documentation was made both in terms of bibliographic resources and the plan of legislative documents and quantitative reporting. We believe that the issue of increasing allocative efficiency of resources is vital to counter the current crisis, but also to maximize the positive effects of public interventions in general and from another state, we consider that state and, consequently, public expenditure budget which should be used to replace the market, can not be regarded as some suggest to be founded and we suggest a line for developed countries. This work was supported by the grant "Post-doctoral studies in Economics: program for continuous forming of elite researchers – SPODE", contract POSDRU/89/1.5/S/61755, project financed by the European Social Fund, by the Operational Sectorial Program Development of Human Resources 2007-2013.

JEL: H50 - General H53 - Government Expenditures and Welfare Programs

Keywords: public expenditures, public debt, tax strategies, economic crises

I. Introduction

The financial crisis that hit the world economy since 2008, had the initial effect of the massive decline in production in many countries, whose level effects were considered comparable with those of the Great Depression. Simultaneously, unemployment rates have increased and will probably be some time still growing in some countries and in Romania. Income tax revenues have also declined, sharply. This crisis can be categorized as having an unusual character, a fact supported by its two main features: (a) how it has spread very quickly from the U.S. to other countries, and (b) how it has become globalized, compared with past financial crises which have generally been limited to one or several countries.

Many analysts considered the current crisis as a clear evidence of market failure, calling for governments to intervene and play an important role both in the short term to stabilize the economy and long term, to expand activities in the public sector and public spending. The theme of the current debate can be considered "more market and less government intervention" (Tanzi 2009: 31). From this perspective, we see that the manifestation of the crisis has provided a convenient argument for increased government spending, but also for their serious restructuring in many countries. In early 2011 states are still involved in the short term to stabilize the market. It is perhaps too early to predict what will happen long term but inevitably short-term actions will

have a major impact on long-term consequences. Now, when countries will come out from the financial crisis, will face a fiscal crisis, which is more difficult to solve.

II.Literature review

The issue of public expenditures was, by its nature, the subject of extensive research in the literature. Normally, however, in the absence of confrontation with another similar economic crisis as it was in 1929-1933, with which currently comparisons are made, no studies have been conducted on evidence showing the correlation between the expression of crisis, government responses and public spending. Extensive studies on the issue of public expenditure were undertaken in the work by Vito Tanzi - *The Changing Role of the State in the Economy: A Historical Perspective*, IMF Working Paper 97/114, International Monetary Fund, Washington in 1997, but also in the work done with L. Schuknecht *Public spending in the 20th century. A global perspective*, Cambridge University Press, 2000, in which was captured a comparative analysis of their impact on society and economy development. Alan Sutherland stressed the impact of public spending in an economy continuously changing conditions in an article entitled *The Expenditures Switching Effect, Welfare and Monetary Policy in a Small Open Economy* CEPR Working Papers published, in April 2004. An important analysis is carried out by Anwar Shah World Bank *Public Expenditures Analysis* in 2005. The issue of public expenditure is enhanced by Vito Tanzi, in the context of recent economic crisis, seeking their role and impact in the new context that most states have faced, in the article *The Economic Role of the State Before and After the Current Crisis* of the 65th Congress International Institute of Public Finance, Cape Town (South Africa), 2009.

III.Research methodology

In relation to the purpose and objectives of the proposed research, documentation was made both in terms of bibliographic resources (books, studies, articles) and the plan of legislative documents (eg., Fiscal and budgetary strategy) and the reporting of quantitative (statistical yearbooks, official reports, national and international forecasts such as those of Eurostat, OECD, World Bank, IMF or the ECB). Data collected were processed and summarized in graphics, in order to capture more adequately the trends identified. It is also used comparative analysis of data which allowed highlighting the differentiation and peculiarities of public spending and their differential impact on social and economic development.

IV.Research results

IV.1.Public expenditure policy in the context of international crisis

At this stage, all states have relied on massive public spending increases, giving rise to major public deficits, public expenditure budget later found related with borrowings, interest and fees. Many institutions (IMF, OECD, ECB, European Commission) have made various estimates of the impact on fiscal variables, implicitly revealing developments in public spending budget. Table no. 1 also reflects estimates by the European Commission in Euro-12 area average and seven other countries. Data refer to the general consolidated budget reflecting final figures for 2007 and projections for the end of 2010.

Table no. 1 Evolution of public expenditure, public debt and balance of payments in the period 2007-2010 (percentage of GDP)

Countries	Balance (excedent/deficit)		Public debt		Public expenditures	
	2007	2010p	2007	2010p	2007	2010p
USA	-2,8	-14,2	63,1	91,1	37,4	43,7
Japan	-2,1	-8,7	173,6	194,0	36,4	46,7
England	-2,7	-13,8	44,1	81,7	44,0	52,4
Germany	-0,2	-5,9	65,1	78,7	44,2	49,0
France	-2,7	-7,0	63,9	86,0	52,3	56,4
Italy	-1,6	-4,8	104,1	116,1	47,9	51,1
Spain	2,2	-9,8	36,2	62,3	38,8	47,1
Euro zone-12	-0,6	-6,5	66,1	83,8	46,1	51,1

* P - forecasts for the end of 2010

Source: European Commission Report, 2010

Year 2010 was the moment expected that the vast majority of countries to overcome the crisis, although in many cases these expectations proved overly optimistic. In this context, should also be noted that the starting point of analysis has specific characteristics, meaning that although 2007 was considered essentially a good year for the economy in general, all countries listed, except Spain, had consistent budget deficits and high public debt, which means that expectations may not materialize in large numbers with positive values in the short term.

According to data summarized in the table, it is noted that there were remarkable increases in public spending as a share of GDP between 2007 and 2010. Elevations range from a minimum of 3.2% of GDP for Italy at a high level 10.3% of GDP for Japan. The increases recorded for the UK (8.4% of GDP), and Spain (8.3% of GDP) are also remarkable, but the fact remains that, in large part, these increases are due especially from lower GDP rather than the real growth of public expenditure.

During this period, local budget deficits, toward which the central budgets of states have initiated substantial balance transfers, in turn led to dramatic increases in deficits in the period 2007-2010. Thus, in the United States and England, deficits reached about 14% of GDP, levels that have not been recorded after World War I and much higher than during the Great Depression. Also, in other countries have recorded spectacular growth, especially in Spain and Japan. As a global effect, increases budget deficits, due to decreasing tendency of gross domestic product and increase public spending budget, have resulted in massive increases in public debt, seen through the prism of its share in GDP, data showing sometimes dramatic levels of the public debt in the analysed countries.

The events of recent years illustrates the danger of an economy in which the financial system operates without careful supervision and regulation, which leads to cycles „boom-bust“, which ultimately are damaging livelihoods and savings of citizens. Forecast estimates that 2011 to represent out of crisis, without knowing what might happen beyond the year 2011 if the crisis would continue. But certainly, these forecasts should take into account the expected increase in public expenditure budget, due to aging and the effects after the crisis. Increase overall public spending and worsening budget deficits will be caused mainly by increases in social spending (pensions, healthcare and long-term care), but also the impact on fiscal revenues and earnings growth rates. In this regard, Table no. 2 reflects the results of forecasts for public spending budget, with the expected adverse demographic issue for the period 2007-2060, in several countries. Even without the impact of the current crisis, these increases in public expenditure

budget will become difficult to bear for countries with an already high level of taxation, high public deficits and debt.

**Table no. 2 Forecasts of Public expenditures due to an aging population: 2007-2060
(percentage of GDP)**

Countries	Pensions	Health	Long-term care	Total growth
Germany	2,2	1,8	1,4	4,8
Spain	6,7	1,6	1,7	9,9
France	1,0	1,2	0,8	2,7
Italy	-0,4	1,1	1,0	1,7
Netherlands	4,0	1,0	4,7	9,4
England	2,7	1,9	0,5	5,1

Source: Economic Policy Committee's forecasts of the European Commission, 2009

In the foreground of the analysis, in which the majority of developed countries are in, but also countries such as Romania, the future potential to increase public spending on the rise in taxation can not be considered feasible. This we can argue in terms of taxation levels which is already high in most states, namely, the fragility of the tax base. In the same context, the possibility of future funding of increased public expenditure can hardly be regarded as sustainable at the expense of contracting new loans because the debt levels are already too high.

In the United States, which are not included in the table, long-term outlook is even more worrisome. The Commission's budget of the US Congress in 2009 stated that "current policies are unsustainable" (Budget Commission of the US Congress 2009), whereas, if they are maintained, and in the most optimistic forecast it will cause deficits (for federal budget) of 7% of GDP in 2020 and a debt of more than 100% of GDP by 2023.

In the current crisis, among countries that have not managed to cope with financial crisis and with a fiscal crisis later, are, first, foremost Dubai Emirate (UAE). Colossus of investment set in motion by the state for construction has generated unprecedented debt and no viable solutions.

Greece is also faced with a violent economic crisis, which has a budget deficit of about 12% of GDP and public debt is estimated to exceed 130% of GDP by 2011. Japan's debt already amounted to 200% of GDP.

Thus, the global financial crisis has exacerbated the fiscal crisis. This is because, on the one hand, the onset of recession, which reduced tax revenues and led to conduct additional public spending on social protection, and on the other hand, in some countries, the huge costs that the public authorities had to bear to avoid bankruptcy of financial institutions.

As we noted earlier, public expenditure budget to GDP increased and is expected to grow in the next period.

Although since the 1980s much of the developed countries, especially European ones, have operated reductions in GDP share of public expenditure, public expenditure as a dynamic have maintained normal growth. The explanation is that these reductions in weight were made against a background of continuing growth of GDP. The most telling example is the one of Great Britain, whose measures were treated as true victories of neoliberal doctrine.

These actions were not long lasting, and the population was willing to choose raising taxes to increase public spending and the various programs provided by them. Thus, governments have returned to welfare programs that (in Britain since Tony Blair's government) have not only financed public expenditure growth based on increases in tax revenue, but also by accepting

shortages of almost 3 % in public construction budgets. Increase public spending in these countries was directed primarily to education and health. Estimates have shown that, in Britain until 2007, nearly a quarter of employed people work at the state and more than 30% of households depended on (over half) of revenues from the state.

Experience in Hong Kong and Singapore, where the public expenditure is usually less than 20% of GDP, confirmed the approach regarding that a low level of public expenditure in GDP, can be a variant of the long term.

We believe that the ability to maintain or decrease the level of public spending as a share of GDP should be correlated with both increased public sector efficiency and greater efficiency with the private sector, able in future to cover part of the economic risks (but not only), facing the citizen. In this context, Vito Tanzi even identify two pillars on which the reduction of public spending budget. The first pillar would require people to be more aware of certain unforeseen events of life and to do so. Obvious examples are considered private insurance for accident and health, along with a package of restrictive measures of social protection offered by the state.

The second pillar would be for government to seize the opportunities offered by globalization and the world market to purchase services not available on the market or are available at a higher cost (Tanzi 2009: 32). These services must be provided even for a small group of citizens, for then they become public. Such services may be the latest medical procedures, training for advanced techniques, etc..

IV.2.Public spending policy in the context of economic crisis in Romania

Deep economic crisis faced by the global economy and, implicitly, the Romanian economy and recent developments that have taken place including Greece, have taken promptly imposed austerity measures. These measures concern in particular the relocation of public expenditure analysis and a new structure to allow a mix of budgetary policies, fiscal and monetary, short stop economic decline, and in perspective on a healthy economic recovery.

In this context, one of the main tools the government has at hand is the public investment program which, through judicious allocation of available resources and spending can correct some imbalances emerged, particularly in construction, or compensate for potential lower instantaneous availability of private sector funding in this area.

In this year, for the public investment expenditure financed from general government budget were allocated resources representing approximately 6.5% of GDP, respectively 16.7% of general government expenditure. In Table no. 3 are presented in the consolidated general government public expenditure and investment expenditure in the period 2008 to 2013 and their share in GDP.

Table no. 3 Total public expenditures and investment expenditures as a share of GDP and percentage from 2008

	Public expenditures in percentage from 2008	Public expenditures % GDP	Public investment expenditures from 2008	Public investment expenditures % GDP
2008		37,0		6,3
2009	101,75	39,4	108,73	7,2
2010p	105,11	39,1	102,47	6,5
2011p	105,24	36,8	104,94	6,3
2012p	112,55	35,8	129,20	7,0
2013p	120,50	34,8	147,00	7,3

Source: own processing after *Fiscal Budget strategy from 2011-2013*, <http://codfiscal.money.ro/strategia-fiscal-bugetara-pe-anii-2011-2013>

The data presented in Table no.3 shows that, in nominal terms, investment costs of the consolidated budget increase each year between 2010 to 2013, are expected in 2011 as the growth of investment expenditure to exceed the the total public expenditure. It is also noted an increasing every year share of investment expenditure in total general government expenditure.

But there are enough doubts of specialists on the rationality of government expectations, based if we consider the realities we face. Thus, for example, is hard to believe that in the current conditions in Romania where the courts reinstate previously earned retirement funds or state employees, counteracting the reduction in public expenditure, there will be enough resources for investment and GDP growth will be most anticipated.

V. Conclusion

Currently increasingly emphasis is put more on exit strategies, and thus the role of the state, involving public expenditure budget, you may have. In the past, these strategies which involved increasing public debt has been passed on increases in inflation, and, on occasion, high economic growth. As it stands, the high economic growth is not feasible in the next few years because of major distortions caused by the crisis, which caused large reductions in output. Moreover, growth rates in recent years, several major countries like the United States, Britain, Spain, etc., but also countries such as Romania, have been somewhat artificially generated massive construction of houses / homes / buildings and their unrealistic prices, excessive profits and which entered the financial market. They maintained artificially increases the rate of economic growth and the tax revenues. In these circumstances, we assume that inflation can not be a solution but, rather, the solution may be to rethink the role in the economy and, implicitly, the judicious use of public expenditure budget. Thus, contrary to many who support the idea of "more public spending and a smaller market" we can analyze the situation in which public expenditure is lower, but more effective and more regulated markets.

Before the crisis, there were views that the changes in dynamics, especially in the structure due to the aging population will create serious problems in terms of sustainability of the state, the current optics. Full effects of these demographic changes will start to be felt fully in the coming years. At present, the crisis will deepen the sustainability of this problem increased public spending states. The idea of giving an economic role in the increasingly important state, in our opinion should not necessarily signify the growth of public spending budget, which in turn would mean higher taxes. Obviously, this perspective should not be understood as a unit, but only applicable to a wider group of countries.

For a number of developed countries including the U.S., supports the idea that the current level of public expenditure may remain constant at this level as long as the state has been able to satisfactorily meet its obligations. Moreover, it focuses particularly on those strategies that will be effective and will streamline public spending as well. We believe that the issue of increasing allocative efficiency of resources is vital to counter the current crisis, but also to maximize the positive effects of public interventions in general.

From another perspective, consider that the claim that state and, consequently, public expenditure budget would be used to replace the market can not be regarded as some founded. The market operates outside the moments of crisis, much better than any government action that you take. In this way, a first possible position adopted for the group of developed countries would be not to intervene in the market, but to print a temporary stimulus to aggregate demand while preparing for post-crisis periods without, usually increases public debt.

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FINANCIAL CONTROL EFFICIENCY IN ECONOMIC ENTITIES

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In this paper the author presents ways to address issues of financial control efficiency of economic entities through tax administration of budgetary revenues.

Keywords: financial control, fiscal control, economic efficiency

JEL Classification: G32

1. Economic Efficiency of Financial Control

As is generally known, the concept of economic efficiency expresses the ratio between profitable effect or outcome and the effort or expense generated by obtaining it. The higher is the achieved effect per unit of expenditure or, conversely, the lower the cost generated by producing a given profitable effect, the higher we consider economic efficiency is. From theoretical and practical points of view, economic efficiency can be generally applied, since, without a certain labor expense, it is not possible to obtain a certain result; work always is the cause, and the product obtained its effect.

The effect of the action of control is expressed in the results obtained from applying the measures resulted from it. The results of control, namely its effects can be grouped into two categories:

- *direct* and immediate effects of control, quantifiable elements that can be known, tracked and aggregated from one period to another;
- *indirect* effects manifesting in time, such as: extending application of control measures, by industry, spheres of activity or even economy.

As for the effort to achieve control, are taken into account, first of all, all expenses resulted from maintenance and operation of the control system (salaries, allowances, daily allowances, school fees and improving the control authorities, etc.). Also, it must be taken into account the effort of the national economy by depriving it of the contribution of the specialists working in the control system.

In our opinion, the factors that influence the efficiency of financial control can be grouped into two categories: *direct* factors and *indirect* factors.

In the category of direct factors, we have considered the control authority, his consciousness, training and methods used during the inspection to increase its efficiency.

In our view in the category of indirect factors are taken into account the material conditions in which the control takes place, audit-specific legislation, relations between inspectors and economic entity and the factual situation, respectively the control objectives, the control period and the results of the control.

Among the ways to increase the efficiency of financial control, we have taken into consideration: financial stimulation of the control authorities, ensuring the independence of control activity, modernization of the control process, increasing educational level of inspectors and rational organization of the control activity.

Last but not least we mention the fact that improving the results of the financial control by attracting additional amounts identified in the state budget is the corollary of the control activity.

2. The Evolution of the Financial Control Activity in Romania

The main activities of financial control are:

- the management and use of funds allocated from state budget;
- management of properties in the state's public domain and administrative - territorial units;
- financial-budgetary discipline;
- computerizing the financial control activity.

Table no.1 Financial Control Activity in Romania (2008 -2009)

Indicator	2008	2009	Rate 2008/2009 (%)
Number of companies that have received financial control	6381	7680	20.4
Number of controls made, from which	8446	10402	22.6
- State departments	291	361	24.1
- National companies and businesses	529	628	18.7
- State-owned or majority state-owned companies	598	762	27.4
- Other controls	7068	8651	22.4
Fines			
Number	954	881	-7.7
Value of fines imposed (million Lei)	1.2	1.9	58.3

Source: <http://www.anaf.ro/public/wps/portal/ANAF>

The table above (Table no.1) shows that in Romania the number of companies that have received financial control and the number of controls made increased by around 20% in 2009 versus 2008. Within these controls the most of them were done to companies state-owned or majority state-owned (27.4%), followed by state departments (24.1%), other controls and national companies. Following these controls the amount of fines increased by 58.3%.

Table no. 2 The amounts established by financial control

	2008 (million Lei)	2009 (million Lei)	Rate 2009/2008 (%)
Total, from which	2141	3828	78.8
- budgetary	291	361	24.1
-financial	529	628	18.7
-fiscal	598	762	27.4

Source: <http://www.anaf.ro/public/wps/portal/ANAF>

The results of the financial control activity have resulted in additional revenue in the state budget, which per total financial control activity was higher with 78.8% in 2009 compared with 2008. From revenues the most significant increase of amounts is registered by income from tax (27.4%) followed by the ones from budget (24.1%) and financial ones (18.7%).

Table no. 3 Turning the financial control activity into profit

Amounts paid during control	2008 (million Lei)	2009 (million Lei)	Rate 2009/2008 (%)
Total, from which	39.7	649.1	1537
- Financial and budgetary differences	23.0	625.0	2615
- Fiscal differences	15.6	23.3	47
- Imposed fines paid	0.8	0.9	11

Source: <http://www.anaf.ro/public/wps/portal/ANAF>

Financial control efficiency is also manifested during the work of tax inspectors which in 2008 compared to 2009 resulted in a significant increase in the amounts paid during the review of 1537% in 2009 compared with 2008.

Budgetary and financial differences identified during the control activity increased in 2009 compared to 2008 with 2615%, tax differences increased by 47% and imposed fines increased by 11%.

Table no. 4 The main activities in financial control

	Number of acts of control	Amounts assessed additionally (million Lei)
The administration and management of financial resources by companies where the state is a major shareholder and by companies that registered loss	757	636.1
Establishing and providing payment sources of repayable funding guaranteed by the state	218	2927.4
Approval of subsidies and transfers from the state budget requested by companies	5690	21.0
Use of subsidies and transfers allocated from the state budget	337	57.6
Concession of assets and activities that are public property of the state	1087	19.2

Source: <http://www.anaf.ro/public/wps/portal/ANAF>

The financial control activity focused in 2009 on five directions, the number of acts of control and amounts assessed additionally being significant primarily for the management of resources at the state-owned companies and for the creation and provision for payment of reimbursable amounts guaranteed by the state.

3. Conclusions

Although control registers a widening of its sphere of action and a diversification of forms of expression, I would like to point out certain restrictions that should be subject to control.

Knowing these limits and restrictions is important and necessary for both the control authorities (who must know exactly their responsibilities and their limits), and for administrative and management authorities (who have no right to restrict or expand control operations at their own will, to prevent verification of some objectives or request the performance of unnecessary or unlawful interference).

The efficiency of financial control is determined by the contribution it has in preventing and eliminating failures, improving the organization and management of the decision-making process and growing the efficiency throughout the whole economic activity.

Our opinion is that the efficiency of financial control must be determined not by the amount of damage found and penalties applied, but, possibly, by volume of amounts receivable, the debits and credits processed, the available stocks recovered as a result of measures taken after completion of inspections.

Today it is estimated that according to how much focus is on preventing misconduct, on the recommendation of the provisions governing the controlled activity, the efficiency of the control will (therefore) be higher. The efficiency of financial control is determined by the permanent connection between the two strands, namely: between the preventive-operative one and the one of immediate improvement of findings.

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Dictionary -

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TAX CONTROL - PREVENTION AND CONTROL OF TAX EVASION

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In this paper the author highlights the ways of preventing and combating tax evasion. For this purpose are highlighted the ways Tax Administration acts in the Romanian business environment to attract additional funds to the state budget.

Keywords: fiscal control, tax evasion, economic effects

JEL Classification: G32

1. Fiscal Control and Tax Evasion

Fiscal control is an important component in achieving the management objectives of the Ministry of Finance, part of public management. The main objective is finding relevant solutions that can lead to mitigation and also prevention and combating tax evasion.

Combating tax evasion can be achieved by fiscal policy measures and specialized agencies authorized to prevent and combat tax evasion. These authorized agencies in preventing and combating tax evasion will be analyzed in terms of place, role and limitations conferred by the fiscal controls made by them, in order to identify practical solutions that lead to making them more efficient. Essentially negative, the effects of tax evasion require firm action to prevent and eradicate this phenomenon.

The main objective to be achieved is finding relevant solutions that can lead to mitigation and also prevention and combating tax evasion, but first we must show the importance of mitigation, prevention and combating tax evasion, importance resulting from the many possibilities offered exactly by the fiscal law to avoid paying taxes for all or part of the taxable goods, but also the broad range of expression of impacts, their scope being very broad, found in almost all areas, economic, political, financial or social, with a large range of proliferation of the phenomenon of tax evasion with multiple effects on both short and long term, both on the state and the honest taxpayer that pays his tax debts to the state or the tax evaders.

Mitigation of tax evasion can be achieved by fiscal policy measures (Mosteanu 2008: 74) and specialized agencies, authorized to prevent and combat tax evasion. These institutions authorized in preventing and combating tax evasion will be analyzed in terms of place, role and limitations conferred by the fiscal controls made by them in order to identify practical solutions that lead to making them more efficient. First, we should focus on the meaning of the term "mitigation" and on its boundaries to combat and prevent and, then, I'll present its practical importance and ways to put them into practice.

The prevention of fiscal evasion means heading it off in order to eliminate its adverse effects, by means of precaution taken by the execution factors, in particular, and by the decision ones. The fight against tax evasion means taking measures to destroy, cut off, eliminate this real financial, economic, social and political scourge. Doctors say that "it is easier to prevent than to treat a disease". This saying is, we believe, valid for tax evasion, but specialists in finance almost unanimously say that tax evasion will exist as long as there are taxes and duties to be paid by taxpayers and, regardless of the measures taken against this phenomenon there will always be new and newer methods by which individuals and legal entities to evade in part or totally from paying their tax obligations to the budget.

Should we conclude from this statement that no effective measures can be taken against tax evasion? Our answer is *tax evasion can not be eradicated, cut off, combated, but can be prevented* (Moraru 2009: 116) *and mitigated if it has emerged and reached easily seen dimensions.*

In our opinion, prevention is the most effective measure to avoid confrontation with the phenomenon of tax evasion, but if it has occurred, in order not to let it reach destructive dimensions, the measures to mitigate its effects become very necessary and important. Moreover, the *mitigation* of tax evasion is the sum of actions that can be taken by state authorities to reduce the intensity or severity of the impacts of tax evasion; tax evasion prevention and mitigation are components of fiscal policy and components of the fiscal system of a country. As the fiscal policy is pursued by the Government as executive power and by the Parliament as legislative power it is obvious that tax evasion prevention and mitigation are actions pending on the political will, the priorities given to the country's leadership in one or another of its development stages.

2. Methods of prevention and control of tax evasion

We stated above that preventing, combating and mitigating tax evasion are tasks for Parliament as a legislative body and Government as executive body. As legislative initiatives are generally taken by the executive organs, automatically the leading role in the fight against evasion is the Government's. This creates at central and local level many authorized institutions with tasks in the pursuit and punishment of acts of tax evasion. All these institutions carry out in one form or another, at one level or another, more specialized or general, control of the way of finding and assessing taxable materials, how to determine the amount of tax and how are determined the taxes to be paid to the State by the taxpayers.

2.1. Tax control role in mitigating tax evasion

A component of financial control is fiscal control, which includes all activities aimed at verifying reality, legality and sincerity of declarations, verifying the correctness and accuracy of performance, according to the law, taxpayers' tax obligations and the work of investigating and finding tax evasion. Using the fiscal control the tax administration has the burden to compensate for tax omissions, inadequacies or errors committed by taxpayers. All this has the purpose to prevent tax fraud made by taxpayers. (Preda 2009: 94)

Therefore it has been established that the activity of fiscal control is mainly aimed at preventing violations and establishing responsibility for damage caused, using for this a variety of means, methods and institutions, and financial control is the main instrument that public powers have at hand to ensure public financial resources necessary for the state and to detect, prevent and combat tax evasion.

2.2. Tax control improvement

Control is "a process of knowledge and training, presenting both an objective side, determined by the specific of the subject and a subjective side, in that at times the subject is simplified". Also, control methodology, viewed as a system implies scientific and regulatory interaction of processes and procedures, principles and means enabling the control action. Financial and fiscal control exercised by the state institutions, experienced throughout history changes that were aimed at improving methods and techniques for preventing and combating tax evasion by eliminating duplication.

Tax inspection involves the following methodological steps: preparation of control; conducting fiscal control; completing the control; capitalizing control findings.

A fiscal control is aimed at checking how to determine the taxable base, the amount of tax payable and determining the delay increases, penalties, or propose penalties for violations of tax

laws in any form. Authorized institutions in preventing and combating tax evasion use, as the main tool for achieving this goal, financial and fiscal control. Reduction of tax evasion depends on the organization and efficiency of financial control and also the degree of collection of budget revenues. Lack of effective control will lead to the proliferation of tax evasion with negative consequences to all taxpayers and the state. Hence the importance of strengthening the role and prompt intervention of state authorities and civil society, organizational and functional structures of authorities specialized on control on all social and economic sides.

For a fiscal control to be effective is necessary for the following requirements to be met (Drăgoescu 2006: 34):

- *defining an organizational framework* outlining the responsibilities of those who are granted powers of tax control, and provide guarantees to achieve these tasks outside of any interference from outside the tax system in carrying out the control activity, but also outside of any abuses from control authorities;
- *a legislative framework* as simple, complete and flexible as possible;
- *a qualified and motivated personnel* to accomplish as good as possible the control activity;
- *personnel remuneration* according to the social importance of their work and not directly proportional to the imposed fines, but also they should be punished for disciplinary aberrances;
- *creating an informational system* that makes public at any time the people who have led to bankruptcy their own businesses and forbidding them, for instance, their registration as shareholders, partners or managers in new companies;
- *technical equipment* to support the efficiency and effectiveness of tax administration in general and fiscal control in particular.

Making efficient controls also means that the control is made based on clearly defined rules and criteria, has a specific purpose, avoiding a control that is based on preconceived ideas, opinions to be formulated only after verification of all data is completed and settling all possible remedies to be taken. Tax inspectors to carry out financial-fiscal control must adopt a civilized attitude, be competent in professional terms, possess a moral sense, must be fair, firm, objective and exigent. To do this they must be prepared through briefings, training whenever updates show up in the control area or in the tax area, especially from a legal perspective because the emergence of new laws may cause many taxpayers to do mistakes, either because of their ignorance or because their intention to use the old law. Also, by reviewing cases of control they can get useful information on the causes met in practice which could lead to improving future controls. Training of tax inspectors can be achieved through advanced courses dealing with the control techniques, procedures to be followed, ethical behavior of inspectors, preparation of control documents, etc.

Regarding the selection of personnel for carrying out financial - fiscal control it should be chosen according to qualifications, experience in economic, financial and accounting fields, professional and moral behavior; also the personnel must not be committed politically or carry out public or professional activities which are in contradiction with the profession of financial inspector or the interests of the institution where he/she works. Consideration should be given to training and recruitment of highly qualified specialists with relevant expertise and moral integrity, qualities necessary for the performance of financial control work.

To increase the efficiency of financial - fiscal control the following measures must be taken:

- Improving fiscal control activities by establishing an effective strategic plan to include all branches of activity of companies. By carrying out spot thematic controls on the carrying out of economic activities according to law can be prevented and detected cases of tax evasion. All these controls must be conducted in a professional manner, in compliance with legislation, must be fair and competent and have as purpose, besides collecting revenue for the state budget in the actual amount and according to the date fixed by law, taxpayers' education and awareness towards the degree of voluntary compliance on state tax obligations;

- Improving training of tax inspectors, their attitude, behavior in their relation with taxpayers, and also the way personnel is recruited. All this can be achieved by implementing training programs and existing staff should be reviewed and should be kept only those who meet the professional requirements and then can be specialized according to the degree of preparedness and experience, on certain taxes and fees;

- Improving existing computer system, namely that “tax vector” that allows generalization of all taxpayers’ tax records by updating these records. This computer system should be improved so as to allow data and information exchange between authorized control authorities and between these authorities and the state. All this information can be used to improve control technique and detection of evader taxpayers.

It is also necessary to create a computer system that would allow access to all inspectors to computerized financial - fiscal legislation and also for control activity itself by updating the database on checked taxpayers, preparation of the control activities; development of a planning system of staff requirements in fiscal control and its recruitment; matching the number of staff assigned to the fiscal control with the fiscal control tasks by taking into account the number of taxpayers and their dispersal throughout the area assigned.

All these measures aim to create an efficient framework for achieving financial - fiscal control so that authorized control authorities to work together, to complete each other in the most optimal way to achieve their goals, namely increasing collection degree of budget revenue and preventing and combating tax evasion.

2.3. Tax system improvement

Checking the specialists’ works we find that the most often cited reason for tax evasion is the legislative framework. The legislative framework is an essential component of any tax system. Tax legislation can be defined as “all legal rules governing the procedure for raising and allocation of the state and public institutions funds to meet social and economic needs and functions of the society”. To be effective, any state’ tax system should be characterized by stability. Thus can be obtained the revenues needed to finance the public budget. The objective of the tax system should be increase of its efficiency and reduction of distortions in economic decisions. To achieve these objectives is important to reduce tax evasion. By reducing tax evasion, will be reduced the gap between taxes to be received and the taxes actually received.

In addition to stability and efficiency, any tax system should be designed to be fair, to be characterized by simplicity, transparency, consistency, to be compatible internationally, to ensure maximum revenue with the lowest costs and to meet economic policy needs on medium and long term. The equity and efficiency criteria are the most important in developing or reforming a tax or the entire tax system.

In the fight against tax evasion must be developed a tax system not too complex and wide. Unfortunately, the tax system in our country is characterized by complexity, instability, and interpretability. Thus, it seems necessary to improve the existing tax system. Improving the tax system should consider improving fiscal and budgetary policy and also reducing the tax pressure. A proposal regarding possibilities to mitigate tax evasion is to develop a computerized system that has as essential component of tax activity the tax information.

A system is “a set of interrelated elements (components) presenting a dynamic interaction based on predetermined rules, in order to achieve a specific goal”, and information system means “an interconnected whole in a systemic view of data, information, information flows, information procedures and processing, transmission and storage of information facilities acting inter-correlated in order to achieve the fundamental objectives of a company”.

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2.4. Legal system improvement

Because one of the major causes of determining and facilitating tax evasion phenomenon is the existence of an inaccurate and incomplete tax law (Pătroi 2007: 101), the combating and mitigation process against tax evasion should be based on changing tax laws so as to eliminate all possibilities of circumventing the law.

A contributing factor of the tax evasion phenomenon is the complexity and multiplicity of tax laws that make them difficult to be known, understood and followed. In order to combat or prevent acts of tax evasion are needed some measures to improve legislation such as building a stable legislative framework, easy to apply, consistent, with firm and concise sanctions against acts committed by taxpayers in order to reduce, if not eliminate the practice of tax evasion. A legislative measure to follow would be to remove all tax incentives from the current tax code; this because the existence of such tax incentives generates inequitable taxes that will determine many taxpayers to resort to any means, even illegal, to fall into those “preferential” categories in order not to pay taxes.

Tax incentives create a bleak environment for investors. Who needs to decide in a state’s economic activity is the market forces and not the tax facilities or exemptions. Normative acts that control the creation and establishment of taxes and fees payable to the state should be drafted so as to not require the development of methodological rules, instructions and details in their application because having a certain interpretable provision it will be exploited for tax evasion purposes.

3. Conclusions

Failure to comply with obligations under the law on combating tax evasion is a contravention according to the degree of social danger that it shows, to their gravity.

The penalties are intended to recover the amounts withheld from payments due to the state budget, interest, penalties and other payment differences set by the control authorities. Tax penalties are “the means by which law violations are punished”.

Acts of tax evasion are more difficult to prove compared with other antisocial acts and this is why the penalties to combat tax evasion must be regulated so that taxpayers have the burden of proving the correctness of the calculated tax and that the tax sanction is unwarranted.

In order to achieve efficiency in preventing and combating tax evasion the penalty of deprivation of liberty should not be given up, even if the person caught in the act, by law, pays tax liabilities discovered as stolen, and in addition, bans to management of companies or associations of the tax evaders should be introduced.

As long as tax evaders escape responsibility, not being sanctioned for their actions, by imprisonment, a lot more taxpayers will be tempted to resort to tax evasion mechanisms to obtain fraudulently increasing income without being subject to taxation. Even if they are caught, they pay their due tax liabilities, are not punished according to the law and can continue to conduct economic activity, the gains obtained by fraud enabling a strong position on the competitive market.

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VIEWS ON THE CONCEPT OF FINANCIAL POLICY AND ITS MANIFESTATION

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The present study proposes an analysis of the main views expressed in the literature on financial policy, as well as the shaping of our own, clear and comprehensive vision, regarding the content of this concept.

The main objective of our research is to clarify the content of the financial policy concept, so that this policy may be effectively used in the service of overall development of our economy and society. Reaching such an objective has implied the research of a vast existing literature on the field, in the country as well as abroad, observing a vast variety of understandings regarding the meaning of the concept itself, the objectives stated within the financial policy as well as the main approaches (ways to follow) for achieving these objectives.

Of course the achievement of such a research is not possible without a meaningful analysis of the principles expressed in this field's literature. In relation to this matter we can see that each author has his own conception regarding the subject under review. These expressed conceptions are, in turn, based on previous research in the analyzed area. The accelerated dynamism proved by the evolution of our economy and society in this stage shows us that through the financial policy, outlined both at a micro and a macroeconomic level, clear fundamental objectives must be formulated that should be possible to achieve by partial objectives (sequential), practical methods and procedures being adapted to them.

Our research is at the present stage, a theoretical and methodological one. It is based on the comparisons we make between the views expressed in the studies of different authors, trying to draw the “red line” of these views and observing the fundamental meaning given to the financial policy concept. We express our conviction that a clear conceptual expression of the financial policy notion comes to the rescue of the general management (macro and microeconomic) facilitating the process of adopting the most appropriate decisions for achieving the objectives set by the financial policy.

The result of our research is represented by the formulation of a clear and comprehensive concept concerning the financial policy.

Removing ambiguities in formulating the concept under review as well as in the means of achieving the formulated objectives is for the benefit of achieving the monetary, financial and budgetary balance at a macroeconomic level, which is the foundation for promoting some beneficial financial policies at a microeconomic level.

Key words: financial policy, financial policy elements, investment policy, financing policy, dividend policy, evolution.

JEL Codes: G 31, G 32

1. Introduction

The financial policy is a complex and controversial, which incited our interest for elucidating its meaning.

It is a complex concept because, looking at it in terms of a system it has two elements, namely:

- macroeconomic financial policy subsystem;
- microeconomic financial policy subsystem.

At a macroeconomic level the following subsystems develop:

- financial policy subsystem;
- budgetary policy subsystem;
- parafiscal policy subsystem.

Within each subsystem, considered as a distinct entity, financial policy's connecting branches develop. We illustrate the statement by the budgetary policy subsystem within which we distinguish: the budgetary revenues policy, the budgetary expenditure policy, the budgetary balance policy.

At a *microeconomic* level we also observe a set of subsystems such as:

- investment policy subsystem;
- current activity financing policy subsystem;
- dividend policy subsystem.

In relation to the financial policy subsystem at a microeconomic level we can also establish the existence of policy ramifications. We illustrate this statement (finding) showing that within the investment policy we distinguish: investments financed with internal resources (national) and investments financed with external resources (international); investments financed from the company's own resources and investments financed from borrowed resources; own overhead investments and contracted out investments.

The controversial nature of the financial policy concept is generated by the fact that each researcher (author) has left his own imprint on the content of the analyzed concept. We, therefore, assumed the burden of detaching the common ideas which are the core of the concept trying to point out each time, the ultimate pursued goal and the methods and procedures used in the practice of financial activity in order to achieve this goal.

2. The financial policy concept

In a general sense, *politics* is understood either as a management activity or as a way of organization and leadership. Since political activity is carried out on the basis of some political programmes, politics is often portrayed as the tactics, the strategy, the methods and the means used to achieve the objectives set out in such programmes.

The way from the concept of politics in general to that of financial policy cannot be crossed without lingering, even just in passing, on the concept of economic policy. Thus, the economic policy is portrayed as an area of government policy, but it is often circumscribed to the concept of economic mechanism. In such an interpretation the economic policy is presented as part of the economic mechanism functioning. We observe that in the system theory, „the economic mechanism appears as a subsystem in economy's organization and management system and government is the most important aspect of the economic mechanism” (Tulai 2003:84-85).

An important element of the general economic policy is the financial policy which is „anchored in the development process of any society” (Onofrei 2000: 11).

Building the financial policy, organizing and managing the company's activity implies, as professor Constantin Tulai used to say: „management strategy and direct practice” (Tulai 2003:92).

In the attempt to define this concept we should start, rightly and without exception, from the statement that the *financial policy* is an element of the economic policy, having to contribute, in its specific ways, at the fulfilment of the economic programme. It is subordinated to this goal but it must exert an active role in achieving it, which means both conception and concrete action and representing the land where the theory offers solutions, strategies confront and options take shape, decisions are taken and also actions to achieve them. Therefore in the defining of the financial policy, as the previously cited author would say, we must take into account at least the following reasons (Tulai 2003:85-86):

- it represents a specific area of the economic policy, it is subordinated to the totality it belongs to, but it carries an active influence on it;

- it implies a certain conception of the financial sector management, they are differentiated by fields of application, solutions are dynamic and always perfectible and the tools are flexible;
- it must be designed and implemented in a way that ensures the financial mechanism's functionality, to establish a proper framework for it to show its self-regulation ability and to exert a favourable influence on the functioning of the economic mechanism as a whole;
- through the specific instruments and levers the achievement of all economic decisions must be ensured under the conditions of superior resource exploitation and high economic efficiency. This means above all, to imperatively take into account, the financial reasons when underlying the economic decisions.

As shown in the literature (Halpern, Weston și Brigham 1998: 216; Bran 1997: 315-317), defining the financial policy concept involves, by default, mentioning its sphere.

Doing a critical analysis of the financial policy sphere, C. Iuga pointed out that sometimes the sphere is restricted to the formulation of its objectives, other times it also includes the used methods and the proper organizational arrangements, pointing out that in his view „the financial policy has a broad coverage area, it establishes the main objectives of the financial activity, the strategy and the tactics of accomplishing them as well as the organizing and management system, respectively, the set of concrete principles, methods and means with regard to the relations, the institutions and financial agencies, which ensure the fulfilment of the functions and roles that belong to finance in the economic and social life” (Iuga 1977: 67).

Such an indication on the financial policy sphere allows us to observe some of its most obvious characteristics, namely:

1. it includes in its sphere, placing first, *setting the main objectives of the financial activity*, derived from the fundamental objective and integrated in the economic policy's objective;
2. the financial policy has *its own objectives*, specific to its domain, and their achievement represents its contribution in the achievement of the overall economic policy's objectives.
3. in order to achieve the established objectives, the financial policy includes financial sector specific policies, but varied in relation to the sub domain they are applied in, being achieved with an appropriate tactics;
4. the achievement of the established objectives through an appropriate strategy and tactics, requires an appropriate organizational framework, the design and use of specific principles, methods, levers and instruments in a framework created by the legislation;
5. on this field the specialized financial institutions and organisms are operating, performing exogenous financial decisions, taking and performing their own decisions, they carry out the financial policy.

Based on these issues and respecting the set out methodological requirements we can conclude that the financial policy, as a specific area of the economic policy, represents a certain conception and a certain way of direct action regarding the organization, management and financial activity deployment.

The financial policy has several characteristic features determined by the nature of the state's prerogatives, as well as by the country's economic, social, etc. objectives in that given stage.

Among the financial policy's characteristic features we mention the following:

- ***The financial policy's scientific nature*** , which is determined by the thorough knowledge of our specific features, by the study of the real, national and international conditions in each stage, by taking into account the economic law's requirements, by the correlation between the financial policy and the nation's interests. Being judiciously planned and enforced, the financial policy is required to fully contribute to the achievement of a high and increasing social work's performance capacity. The financial policy's effects are reflected in the development of productive forces, in the increasing of the gross domestic product, in satisfying the material and spiritual life requirements, of the population which are on the increase.

- ***The financial policy's realistic nature*** resides in the fact that it has to be developed and carried out based on thorough knowledge about the national economy's realities, particularities and possibilities of each stage. The financial policy is designed to help promote national interests, achieve national independence and sovereignty as well as to help collaboration and cooperation at a national level.

- ***The transforming, renewing character*** of the financial policy is generated by the judicious use of financial instruments. The financial policy is not established once and for all, it is not immutable, but it evolves, it changes, it continuously improves and it adapts both regarding the goals as well as in the use of financial instruments.

The financial policy has a certain independence from the state's general policy, because it has its own objectives, it uses specific tools and procedures, which implies the existence of its own methodologies.

Studying the issues of financial policy at a microeconomic level (Halpern, Weston and Brigham 1998: 220), we observe its main manifestation directions:

- selection of investment projects;
- identifying financing modalities;
- substantiation of the company's financial structure and ensuring an optimal ratio between equity and borrowed capital;
- choosing the optimal allocation for net profits and dividends;
- selection of optimal solutions for changing the equity's size.

It must be noted that the company's financial policy is directly influenced by the macroeconomic financial policy, through instruments that at the microeconomic level are considered to be external influence (constraint) factors.

Financial policy involves not only setting goals to pursue in one area or another for a certain period of time but also establishing the means to achieve them. It is also necessary to make a critical analysis of its promotion's results, in order to correct any deficiencies, shortcomings, mistakes came up or occurred in time.

Putting together and comparatively analyzing the many definitions given to the financial policy in the literature (Halpern, Weston and Brigham 1998: 222; Bran 1997: 318), we find both common elements and some differences, not only in shades but also in the sphere coverage. Both of them relate to the three present elements, without exception, in all encountered definitions, namely: ***the reference, the purpose and the used procedures***.

Referring to the ***specific used methods***, they are portrayed as a set of methods and means; principles, methods and means; rules, principles and methods or methods, levers and mechanisms specific in the financial sector. Therefore not only the wording is different but also the number and kind of arrangements involved.

In a different way is presented the field of reference, the same in its essence, namely the ***financial sector***. It circumscribes, in different formulations, the same elements, namely:

- finance, financial relations or in a detailed presentation, their display field (creation, distribution and optimum use of funds);
- institutions and specialized institutions belonging to the financial unit;
- the legal executive legal framework, including financial regulations or legislation.

Finally, for the ***concerned purpose***, the formulations are also different. Some refer to the social and economic policy objectives as a whole, but different in each step or from one program to the other; others are confined to the fundamental strategic objective of the current phase (Chandler 1996: 63); in some of them the aim of achieving the economic policy objectives is fixed ("Help 2003: 87), and finally in others, it is stated that the financial policy is oriented towards achieving the social mission of finances (Văcărel 2007: 76), ensuring the fulfilment of their functions and roles in each phase.

Taking into account the ones mentioned above, we could shape our *own opinion* which means that we can define *financial policy* at a microeconomic level as ***the combination of financial methods and instruments involved in the acquisition, allocation and management of financial resources in order to achieve the ultimate objective of the firm - thus maximizing market value, increasing shareholder wealth.***

3. Company's financial policy elements

At a microeconomic level the financial policy includes a set medium and long term objectives, which relate either to all financial activity or to its major components. Among these we distinguish by their special meanings: the volume and structure of available resources, performers of various activities, financing sources, intermediary and final terms, global and partial indicators.

The specific consequences of financial policy decisions are manifested in combining the company's financial cycles (operating, investing, financial operations) whose graphical representation is depicted in Figure no. 1.

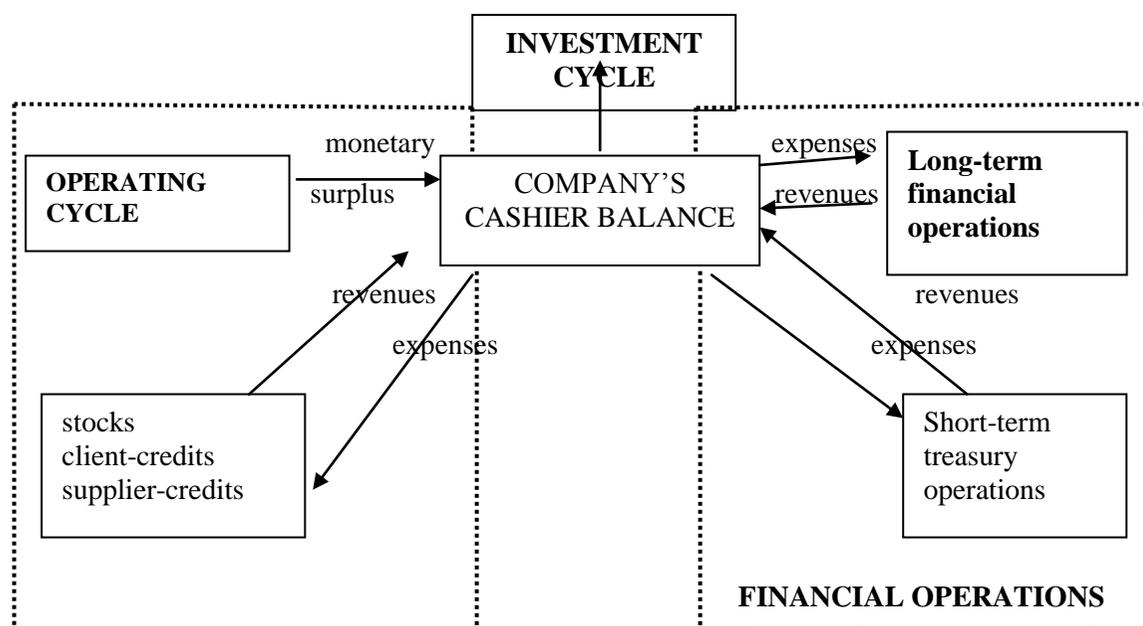


Fig.no.1. The enterprise's financial policy action range

Source: adapted by the author from (Onofrei 2000: 46)

As shown in the figure above, the financial policy's range includes a variety of decisions to be taken by the company's management about the pace and terms of capital creation, namely the financing of the company.

Modern financial theory holds that, at the firm's level, there can be identified three broad categories of policies (Stancu 2007: 47), which are considered interdependent, namely:

- investment policy (internal / external);
- financing Policy (own sources and / or borrowed);
- dividend policy (distribution and / or reinvestment of dividends).

The investment policy is considered primal, whereas it affects capital for a longer period of time. Involving significant capital expenditure in the hope of obtaining a successful future, underlying the investment decision (policy) should aim at:

- the investment's participation in the total value of assets (net present value);
- payback period of invested capital and hence the starting moment of net gaining from that

investment;

- alternative analysis of investment's further exploitation or disinvesting and seeking other forms of investment (decision tree method).

The financing policy is determined and in the same time it is determining the investment policy. The financing policy's foundation is represented by the proposed amount of investment, by the existing capital and the one necessary to continue to run the investments. Of particular importance is the company's financial structure, namely the relationship between equity and borrowed capital.

The dividend policy is determined by the predilection and in the same time the investor's wish to receive annual dividends. Although theoretically, in perfect market conditions, dividend policy does not affect the firm's value, recent studies have demonstrated the favourable effect of maintaining and possibly increasing the rate of distribution (dividend/share) on the course of shares, namely the awareness effect on the dividend. Some researches (Walter 1996: 29-35) mainly the agent theory, demonstrated the role of dividends distribution in settling conflicts between shareholders and managers on one hand and between the groups "shareholders and managers" on one side and creditors on the other.

Since dividend policy distributes the net profit between cash flow and net profit share distribution, it affects both the firm's financing policy and, indirectly, the investment policy. Each of these policies involves certain types of decisions and, most often it is considered that the company's main financial decision is the choice of a certain financial structure (Manolescu 1997: 486). This is followed closely by three other coordinates as the dividend distribution policy, increasing the company's equity and its debt.

"The existence of a power structure - P. Conso was saying - is the support for the internal decision-making process. The decision's degree of rationality depends on the role of people and on the values system they agree to join. The nature of power is thus an important determinant of company behaviour "(Conso 1981: 159).

In our opinion, the influence of the internal power structure of a company must be analyzed in terms of number of partners / shareholders in it. Thus, an individual firm holding the power and capital monopoly will have a very simple internal structure; in the case of a company formed by association (as a society), the internal structure becomes complex and dependent on the number and diversity of partners (businesses, banks, state, citizens, etc.) leading to the phenomenon of power distribution among its shareholders.

Therefore, financial policy-making requires knowledge of business environment and anticipating its evolution, based on foundations coming from the financial information system and from power relation correlations with the help of legal norms.

Having clearly defined the coordinates of its development, the company has the necessary autonomy to decide and to choose the way to follow. But not always financial decisions taken at a microeconomic level can be accepted at the macroeconomic one, which highlights the relative character of this autonomy, suggesting the idea of a competition between the company and the state. In this sense Jean-Paul Betbeze's finding takes on a special significance: "with every business modulation the state considered that it had to sustain it and with every acceleration that it had to brake. It has also created the habit of being the judge of other's performance, measured in terms of growth, employment (labor), price or foreign exchange. This is how it turned the interests towards facing the major problems: growth, distribution, planning [...] passing over in silence the fact that it should not manage the results of the billion operations of these organic cells in the economic universe - companies "(Betbeze 1983: 3) .

Financial policy is a component of the company's management being decisive in the strategic options, which is those fundamental options that deeply engage the future as well as in the current management decisions.

The company's financial policy is called to secure answers for at least the following questions (Ana 2001: 47):

- a. resolving issues related to insufficient funds;
- b. setting destinations and rational use of funds;
- c. ensuring financial stability;
- d. price stability;
- e. the continuous cost reduction.

Another direction of the company's financial policy is the tendency to maximize the economic capital through the options related to investment and funding. The capital increase has implications related to the financing cost and at the same time, issues related to the proportion between equity and borrowed capital for financing fixed and current assets.

In relation to capital cost, practical experience shows that it lowers through a judicious use of loans and will become a burden the optimal indebtedness level is exceeded. The increase of debt ratio over an accepted optimum entails the risk of lower profitability and increases the degree of insolvency.

The role of financial policy at a microeconomic consists in selecting the investment projects that can contribute greatly to increasing the company's value in providing resources necessary for a normal activity performance with low cost, achieving optimal stock and debt management as well as establishing a consistent strategy to pay shareholders. The purpose of this policy should be represented not only by increasing the value of the company but also the harmonization of the interests of all stakeholders involved in the business (shareholders, managers, employees, lenders, state, local community). These complex interactions are expressively shown in Figure no.2:

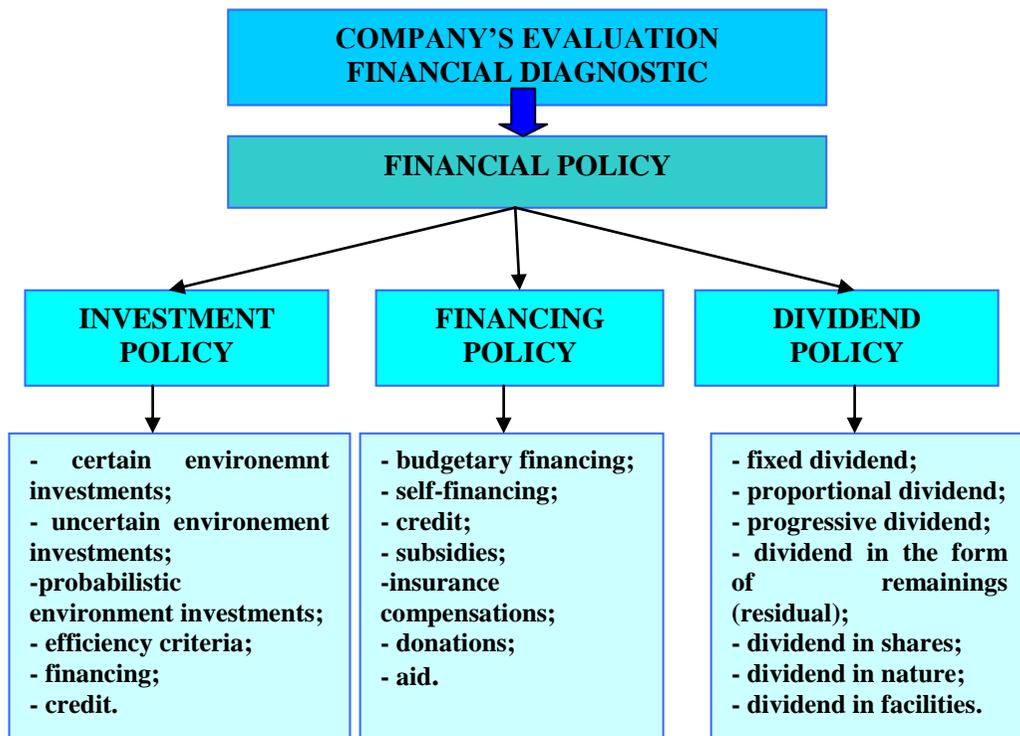


Fig.no.2. Financial policy's structure

Source: author's own conception (based on the present financial theory and practice)

Based on information provided by the financial and policy analysis we can make an assessment of the company 's patrimony assets and liabilities, an assessment of future income streams, which is expected to be released by the company or a mixed assessment of the present and future capacity of paying capital investors.

4. Conclusions

From the above we detach a first conclusion linked to the expression of the financial policy concept, namely that it is complex and controversial. It is complex and in the same time synthetic, because it reflects a variety of subsystems, already shown, in the introduction of this study. It is a controversial system, in that researching a vast literature in this field we found it difficult to find the same definition given to the concept by two or more authors. A second conclusion drawn is that a range of influences that come from both internal and external environment act upon the company's financial policy components adopted by its management. On behalf of associates and shareholders as owners of the company who are interested in at least maintaining it as well as in the consistent dividends remuneration. On behalf of the lenders either by shrinking or expansion the volume of loans or by interests charged considered by the firm as elements of cost. On behalf of the state, either by tax policies or within the general legal system, that favours or inhibits business. Besides all these there are also other factors in the company's external environment, objective or subjective, such as: market reaction, direct partnership relations, crisis phenomena, extreme natural phenomena (earthquakes, fires, floods, landslides), etc..

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SMES' SECTOR ACCESS TO FINANCE: AN OVERVIEW

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Through their contribution to the creation of added value and new jobs, the small and medium enterprises (SMEs) have a significant role in the economic and social development of a country. However, these enterprises are facing numerous obstacles that limit their performance, growth and development. Among the difficulties faced by SMEs, the access to finance is often reported as a major obstacle to the deployment and expansion of their activity.

The paper aims to highlight the difficulties faced by SMEs in securing financing resources, emphasizing the differences between countries and also between SMEs and large enterprises. Knowing the difficulties in SMEs financing is essential for policy makers in order to design and implement appropriate measures, which will help to improve the access to financing for these enterprises. Thus, another issue addressed, synthetically, in this paper aims the measures taken by public authorities in order to support the access to financing for SMEs.

Key words: Small and Medium Enterprises, access to finance, financing constraints, bank financing, support measures

JEL code classification: G30, G32, O16

1. Introduction

In all countries, small and medium enterprises are a significant source of economic growth and jobs creation. Furthermore, these enterprises, through their dynamism and flexibility, are an engine of innovation and growth. Based on these considerations, it is easy to understand the crucial importance that the easy access to funding has, taking into account that it can support the creation of new businesses, the innovation process as well as the growth and the development of the existing businesses, which in turn boost the economic growth of a country.

The paper is structured as follows: *the first part* contains the introduction remarks regarding the importance and relevance of the approached theme; *the second part* is dedicated to a literature review which summarises the main researches undertaken so far on this theme; *the third part* highlights the major difficulties in SMEs financing, and *the fourth part* of the paper reflects, mainly, the difficulties reported by the entrepreneurs in dealing with banks and the measures that need to be taken in order to improve the access to financing for these enterprises. The study ends with conclusions.

The research methodology used in this paper starts with a literature review in order to highlight the importance of the subject addressed in our research. The analysis conducted in this paper is based on data and statistics provided mainly by the World Bank surveys, by certain empirical studies and by the National Council of Small and Medium Sized Private Enterprises in Romania. Based on the methodology used, the paper indicates the difficulties in SMEs financing and the crucial importance of enhancing the public authorities concerns regarding their alleviation, especially by adopting measures focused on increasing financial development.

The limited availability and even lack of statistical data regarding the SMEs financing situation from various countries, including Romania, impose certain limits to the researches in the field, which can be overcome as policy makers realize the vital importance of developing and monitoring specific indicators regarding the financing of this type of enterprises.

2. Literature review regarding the access to finance for SMEs

The access to finance for SMEs represents a topic of great interest for the academic literature, as witnessed by the large number of studies addressing such a problem.

Numerous studies based on various surveys highlight that access to finance is one of the most important obstacles in the way of enterprises' growth and development, especially in the case of small and medium enterprises.

The study realised by *Beck, Demirguc-Kunt, Laeven and Maksimovic* (2004) reflects, based on a survey that has included 10.000 firms from 80 countries, the fundamental factors to which depends the enterprises' access to finance. Thus, the study highlights the relationship between the access to finance for enterprises and their characteristics, such as age, size and propriety structure. From this perspective, the authors find that young firms of small size as well as national ones face greater obstacles when they seek to obtain financial resources. The study also highlights the relationship between the degree of economic and financial development of a country (expressed through the degree of financial intermediation, the level of capital market development, the efficiency of the legal framework, the GDP per capita) and the access to finance for enterprises. From this point of view, the authors demonstrate that in the financial developed countries it can be accounted a decrease of the difficulties that the firms face when they try to obtain financing resources. Furthermore, the study concludes that the institutional development is the most important feature that explains the differences between countries in terms of financing obstacles faced by enterprises.

Beck, Demirgüç-Kunt and Maksimovic (2005) point based on a survey realised on firms from 54 countries that small and medium-sized enterprises are faced with financial and legal constraints and corruption issues in a much greater degree when compared with the large firms, thus the impact of these constraints on the firm growth is inversely proportional to the size of the firm. Moreover, the authors also noted that the financial and legal system development and the process of reducing corruption help to relax the constraints faced by small and medium-sized firms.

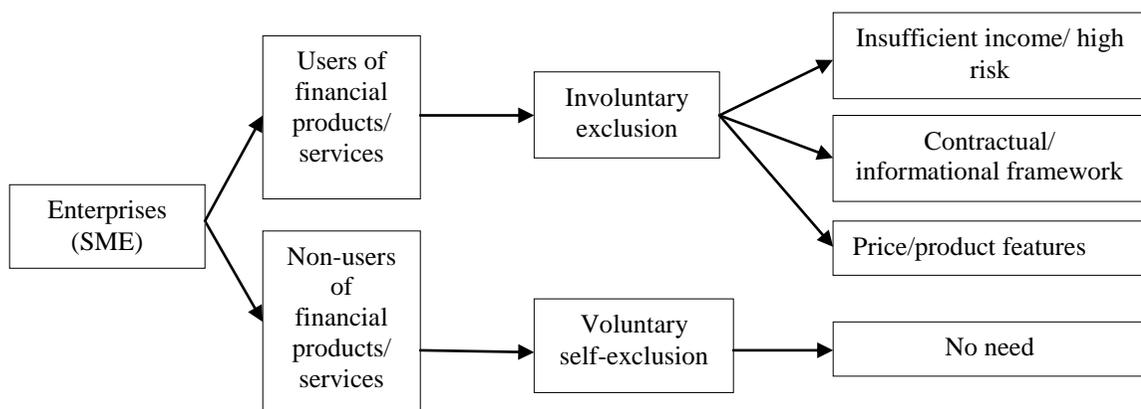
Beck and Demirguc-Kunt (2006) highlight that access to finance is an important growth constraint for SMEs that financial and legal institutions play an important role in relaxing this constraint. The authors also noted that innovative financing instruments can help facilitate SMEs' access to finance even in the absence of well developed institutions.

Ardic, Mylenko and Saltane (2011) analyze, using statistical data, the macroeconomic and institutional factors that are influencing the SMEs' financing through loans. Similar to other studies, the authors have found a positive correlation between the overall economic development (measured by income per capita) and financial development (measured by the ratio of private credit to GDP), on the one hand, and the SMEs' financing level, on the other side. Moreover, the authors demonstrate that the financing level of SMEs depends also on the legal framework and the overall business environment.

3. The general framework regarding the obstacles in the financing process of the SMEs

In general, the access to financial products/financial services or the financial inclusion assumes the absence of barriers in the way of using financial products/services, regardless of whether these obstacles are or are not related with pricing (*Demirguc-Kunt, Beck and Honohan* 2008: 2). Thus, improving this access means increasing the degree in which the financial products/financial services are available for everyone and at a fair price.

Unlike the use of financial products/services which is determined by supply and demand, the access aims at providing financial products or supplying financial services. The difference between access to financial products/services and their use is reflected in Fig. no 1.



Source: based on Demircug-Kunt, Beck and Honohan 2008: 29

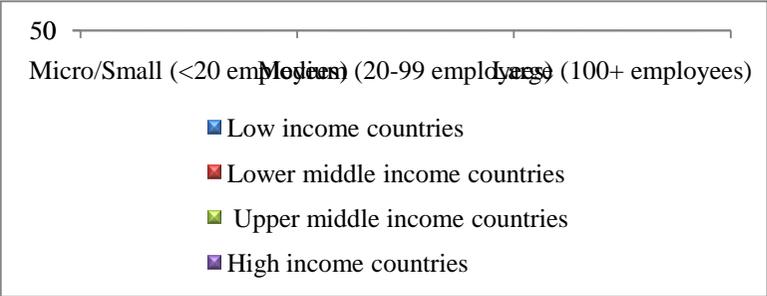
Fig. no 1: The difference between the access to finance and the use of financial products/services

Within the firms that do not use financial products/services it can be distinguished several categories, whose identification is essential for the authorities in order to adopt the necessary measures to improve their access to finance. Thus, on the one hand, there are *the firms that have access to finance*, generally to financial products and services, but do not use them because they do not have viable investment projects. On the other hand, it can be distinguished *the involuntarily excluded firms*, those firms that do not have access to finance or financial services, although they demand them. The involuntary exclusion of firms from finance/financial services appears in the situation in which some companies do not earn enough income or do not have the guarantees requested by the suppliers of capital and therefore have a high credit risk. At the same time, there are situations when some companies request funding, but the financial and banking institutions are not answering to these demands because the cost involved would be too high for them. Finally, within the category of involuntarily excluded firms appear also those for which the price of financial products/services is too high or the financial products'/services' features don't meet their needs.

The access to finance is indispensable for the efficient allocation of capital and the enterprise development. However, when compared with large enterprises, small and medium enterprises face many difficulties when pursuing to procure financial resources, which are due to several causes, including: the unstable and inadequate juridical and legislative framework, which does not support the relationship between capital providers and the enterprises that require financing; incomplete information and even lack of information from the part of both capital providers and enterprises, which prevents the development of normal and efficient relations between them; lack of a credit history and insufficient guarantees for creditors, especially in the case of the small and young firms; limited and, sometimes, inadequate range of financing products.

Numerous surveys carried out, particularly, by the World Bank highlight that the access to finance is often mentioned by the SMEs as one of the most important barriers to their well functioning and growth. For example, the surveys conducted by the World Bank, in 2006-2009, found that, worldwide, 31% of the studied firms report that the access to finance is a major

obstacle in the way of carrying out current operations, the percentage being even much higher, at 40% in the case of young firms with up to three years experience (Chavis, Klapper and Love 2010: 1). Also, a series of global surveys, including the information provided by the World Business Environment Survey, show that small and medium size enterprises report the cost of financing as the most important obstacle to their growth. The difficulties in SMEs financing are more severe in the case of developing countries, this assessment resulting from the fact that approximately 50% of the micro and small sized enterprises report the difficulties in financing as a major obstacle (see Fig. no 2).



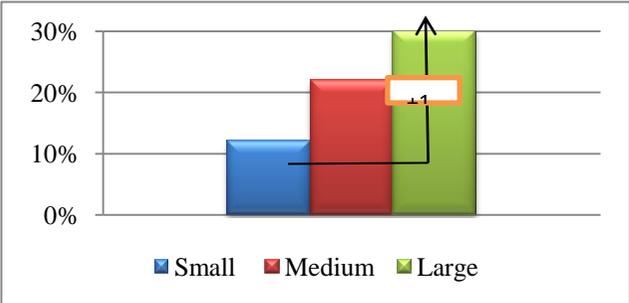
Source: International Finance Corporation 2010: 12

Fig. no 2: The average percentage of firms that have reported that the access to finance and the cost of financing represent a major constraint

As results also from Fig. no 2, regardless of the group of countries where SMEs are located, about one-third of these firms report that the access to finance is a major constraint to their current operations (International Finance Corporation 2010: 12).

4. Difficulties in SME’s banking finance access and support measures

In most countries, especially in the ones with bank-oriented financial systems, the SMEs main source of external financing is represented by the bank loan. Thus, the access to this type of loans is vital for the development of these enterprises. However, surveys show that small firms when compared with large firms are using in a much smaller degree bank financing for new investments (see Fig. no 3).



Source: Own simulation based on the data provided by International Finance Corporation 2010: 15

Fig. no 3: The percentage of firms that use bank financing for new investments

As we have mentioned within the paper, the usage of financial products is determined by supply and demand. Therefore, it is important to identify why small size firms use in a lesser extent bank financing. In this regard, some studies (Banerjee, Duflo 2004) have demonstrated that the main reason would be related to the supply, because every time when the SMEs had access to

subsidized credit, they used it to increase the production. Such a conduct of firms strengthens the assertion that the lack of access to finance is a major obstacle to their growth. Furthermore, in the context of the current global economic crisis, the limited access of SMEs to financing has been increased as a result of reduced availability of bank loans. Thus, this type of enterprises faces major difficulties.

The survey conducted by the National Council of Small and Medium Sized Private Enterprises in Romania (CNIPMMR), in the period 7 - 29 October 2010, highlights the main difficulties faced by the SMEs in their relation with the banks. Thus, 82% of the interviewed entrepreneurs considered that *the access to bank financing is very difficult*, especially because of the excessive bureaucracy, the unjustified high requirements, the high interest rates, the rigidity of the creditworthiness indicators used by banks, the numerous types of commissions and fees required. Also, over 61% of the SMEs' entrepreneurs and managers reported *banks' lack of transparency* (by charging hidden fees, ineffective communication etc.), *no real negotiation* (by using standard contracts, banks' refusal to modify or complete the credit contract, etc.) and *unjustified and abusive contractual terms practiced by banks* (such as performing unauthorized transactions in accounts and in general bank frauds). The knowledge of these difficulties has a vital importance regarding the need to adopt measures in order to support and improve the SMEs' access to finance.

Overall, the obstacles in the way of SMEs access to financing are related both to the entrepreneurs and the economic environment as well as to the institutional and regulatory framework (Nicolescu and Nicolescu 2008: 171). Among the obstacles related to entrepreneurs, a series of surveys conducted in various countries, identify: the lack of knowledge regarding the possibilities of obtaining financial resources, the lack of awareness regarding the consulting institutions, the development of business plans that do not meet the requirements of the lenders or investors, the reduced negotiating skills in relation with capital suppliers and the insufficient guarantees available. In regard to the second category of obstacles, they refer in particular to the reduced availability of funding in some cases, excessive guarantees imposed by some banks for SMEs' loans, the high cost of SMEs' financial consultancy services, corruption, bureaucracy.

Starting from the fact that the SME sector has a key role in the economic and social development of a country, in most countries supporting this sector has become a primary objective of the governments.

In order to improve the access to finance for SMEs, the public authorities from different countries have adopted a series of measures, depending on the particularities of each country, which aimed (International Finance Corporation 2010: 26) at improving the juridical and regulatory framework, developing the financing instruments for SMEs and direct interventions on the market in order to stimulate SMEs' financing (for example, by granting loans through certain state institutions, providing guarantees for loans to entrepreneurs, providing grant financial allocations etc.).

The significant importance of easy access to finance for enterprises, particularly for SMEs, and especially in the context of the current crisis, is highlighted by the fact that approximately two thirds of the EU business support measures, adopted by the European Commission and set out through the European Economic Recovery Plan aims to facilitate the access to finance (European Commission 2009: 79).

Improving the access to finance for SMEs still remains a concern and also a challenge for the authorities from the national, European and international level. For example, at EU level, through the Review of the *Small Business Act* (SBA) for Europe are set out new measures *to improve the access to finance for SMEs*, including *facilitating the access for SMEs to structural funds* through reducing reporting requirements, establishing the "*credit ombudsman*" in order to facilitate the

dialogue between SMEs and credit institutions, *avoiding double taxation through tax legislation*, that would hamper the cross-border venture capital investments, which play a significant role. A number of studies, especially the empirical ones, highlight the crucial importance of the degree of financial development of a country for SMEs' access to finance. Therefore, the measures taken by authorities in order to support the SMEs' access to finance should focus on ensuring a high degree of financial development, which would ensure a greater availability of financing for businesses. Concretely, the authorities should adopt measures aimed at the seven pillars commonly used to measure the degree of financial development, namely institutional environment, business environment, financial stability, banking financial services, non-banking financial services, financial markets and financial access (World Economic Forum 2010: 5).

Conclusions

The easy access to finance for SMEs has a significant importance for the creation of new businesses, the growth and development of already existing ones, which, in their turn, foster the economic and social development of a country. Moreover, under crisis conditions, supporting the access to finance for SMEs is vital because these firms can contribute to the recovery of the national economies. However, most surveys emphasize that SMEs report, consistently, the access to finance as one of the most important obstacles to their functioning and development.

The difficulties that SMEs face when they are seeking to obtain the necessary funding resources are related both to the entrepreneurs and the economic environment from each country, as well as to the existing regulatory and institutional framework. In order to mitigate these difficulties, the measures taken by public authorities should focus on increasing financial development, which would ensure greater availability of financing for businesses and thus economic growth.

Given the reduced availability and even lack of statistical data regarding SMEs' financing in various countries, including Romania, we consider that policy makers need to focus their efforts in order to shape and monitor a series of significant indicators, such as the share of loans granted to SMEs, based on their size, experience and sectors of activity, that would be useful for public authorities, creditors and investors.

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LABOUR TAXATION IN THE EUROPEAN UNION

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This article proposes an analysis, which we consider extremely useful in the current economic context, of the evolution of labour income fiscality, more precisely, the effect of the public debt growth on the tax wedge for the labour income.

The share of fiscal revenues from direct taxes, indirect taxes and social contributions is relatively close in the old member states of the European Union in comparison with the new member states, which register a lower level of income from direct taxes. The low level of income from direct taxes is compensated by more significant shares of the social contributions or indirect taxes.

The main motivations of cross-border migration are: a successful career in a multinational corporation, high variations of the tax rate, of the salary income between states and, last but not least, the level of the net salary. To this day, there are no plans to harmonize across the European Union the legislation regarding the taxes wages and the social security contributions. Still, the European Union had in view the coordination of the national tax systems to make sure that the employees and the employers do not pay several times the social contributions in their movement across the community space.

Despite the fact that some states tax the labour income at a low level, the labour fiscality remains high in the European Union in comparison with other industrialized economies, probably also due to the fact that the majority of the member states have social market economies. The increase of the fiscality level for the labour income determines the decrease of the employment rate and the raise of the unemployment rate.

The solution to guarantee a higher employment rate, which is a target of the European Union Strategy „Europe 2020” could be the relaxation of the labour income fiscality by transferring the tax wedge on the labour income towards property or energy taxation.

Keywords: labour income, social contributions, tax quotas, taxes

JEL Codes: F22, G28, H2

1. Introduction

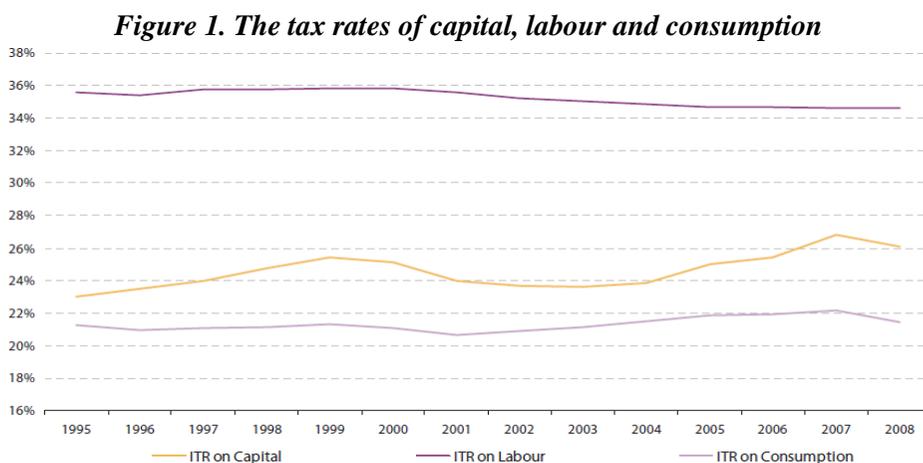
The mechanism of the Single European Market is based on the four freedoms acknowledged by the European Community legislation: the free movement of goods, people, services and capital. The main motivations of cross-border migration are: a successful career in a multinational corporation, high variations of the tax rate, of the salary income between states and, last but not least, the level of the net salary. According to some research realized in Switzerland (Kirchgassner, Pommerehne, 2001) and (Feld, Kirchgassner, 2001) we can notice that the level of payroll tax and the level of social contributions have an important influence on the dispersion of the labour force with high income (Peter Egger and Doina Maria Radulescu 2008: 2).

To this day there are no plans to harmonize across the European Union the legislation regarding the social security contributions. Still, the European Union had in view the coordination of the

national tax systems to make sure that the employees and the employers do not pay several times the social contributions in their movement across the community space.

If we analyze the structure of budgetary income collected by the European Union, according to the economic classification, the labour taxation and the compulsory social contributions are the most important source of revenue, representing an average of 50% of the budgetary income collected in the European Union. Thus, the labour taxes collected by ten member states: Hungary, Slovenia, Czech Republic, Holland, France, Belgium, Finland, Denmark, Greece and Italy represent between 50-55% of the total income; the labour taxes collected by four states: Sweden, Austria, Germany and Estonia exceed 55% of the total income.

Concerning the rates of labour taxation, the following figure proves that these are the highest of the European Union, amounting to 34%-36% in comparison with the lower rates of capital gain tax and consumption tax.



Source: Eurostat

During the period before the crisis, in the European Union, generally speaking, the tax wedge increased especially concerning the labour taxes and the social contributions as a result of the need to finance the government expenditures.

During the period after the crisis, the fiscal measures to support the employment offer adopted in the majority of the European Union states visible in the reduction of the fiscality for labour income led to a decrease of the share of the direct fiscal incomes. The tax wedge on the salary income, especially for the low incomes decreased in almost all member states. Instead, the level of social contributions, which increased during the period 2008-2009 registered an asymmetrical evolution. (European Commission, Taxation Papers, 2010: 18).

2. Aspects regarding the taxes wages in the European Union

The labour tax rates in the EU increased continually from 28% in 1970 to approximately 42% in 1997. The continual growth of labour fiscality was due to the tendency of excessive increase of the unemployment rate at the beginning of the 1990s, as a result of the recession. Thus, at the end of the 90s the concerns aiming to decrease the excessive employment costs in order to stimulate the employment rate became more important. While some measures could be generally applied like: the decrease of labour tax rates or of the social contributions rate, others aimed at certain target groups: the decrease of the contribution rates for the unskilled workers.

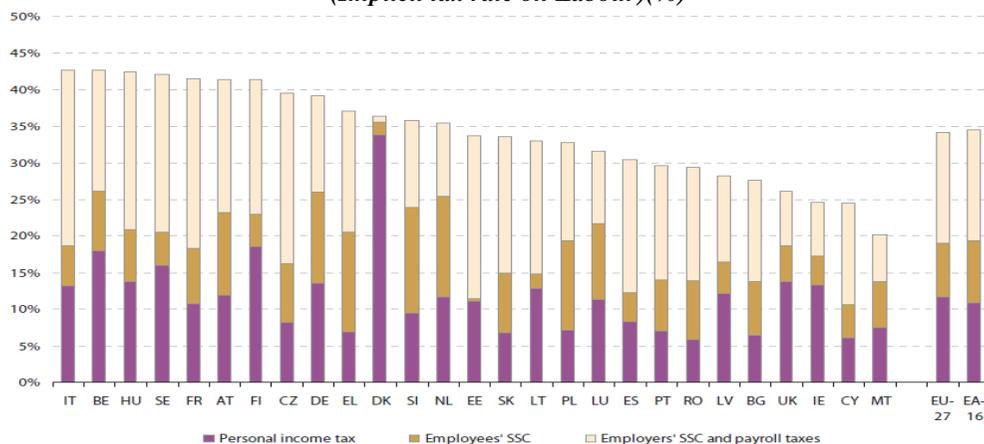
Regarding the fiscal reforms adopted by the member states, the national governments preferred measures in order to narrow the taxable base or to grant allowances for the low income households rather than to reduce the tax rate. Thus, measures meant to increase the labour tax rate were adopted by Greece, France, Latvia, Portugal, Slovenia, Great Britain, Ireland; measures meant to decrease the labour tax rates were adopted by Austria, Germany, Denmark, France, Finland, Hungary, Latvia, Lithuania, Romania. Measures meant to increase the taxable base were adopted by states such as Denmark, Greece, Estonia, Spain, Ireland, Hungary, Portugal; measures meant to decrease the taxable base were adopted by Austria, Belgium, Bulgaria, Germany, Denmark, Finland, Hungary, Luxembourg, Holland, Poland, Portugal, Romania, Sweden. Fewer fiscal measures were adopted regarding the social contributions. The states which chose to apply measures meant to increase the social contributions rates were: Cyprus, Estonia, Portugal, Slovakia, Finland; the states which chose to decrease them were: Bulgaria, Czech Republic, Sweden. The enlargement of the taxable base was adopted by the following states: Bulgaria, Czech Republic, Estonia, Latvia, Lithuania and the narrowing of the taxable base was adopted by Finland.

The series of changes occurred during the period 2000-2008 had a very different effect upon the labour fiscality in the member states. The states of Central and Eastern Europe which joined the European Union in 2004 and 2007 faced a decline stronger than 4.4% of the labour tax rates, a decrease of 4.4%, while the average decrease of tax rates in the European Union was of 1.7%. The strongest diminution of these rates, of 11.1% was registered in Bulgaria and an increase of the rates was registered in Portugal (2.4%, Greece (2.5%), Spain (1.9%), Luxembourg (1.6%), Cyprus (2.9). During the period 2000-2008, in Romania, the labour tax rates decreased by 4%. (European Commission, Taxation trends in European Union, 2010: 107).

The international economic and financial crisis did not determine a decrease of the labour fiscality. If we analyze the situation in the member states, we can notice that the most significant decrease of the labour tax rates was registered in Denmark, Estonia, Romania, Ireland, Sweden, Bulgaria, Latvia and Lithuania. We can also notice that the taxation level in the three northern states is closet o the European Union average. The labour tax rates increased significantly in Cyprus, Portugal, Greece, below the European average in the case of the first two. The lowest labour tax rates are registered in Malta (20.2%), Cyprus (24.5%), Ireland (24.6%) and the highest labour tax rates are Italy (42.8%), Belgium (42.6%) and Hungary (42.4%).

If we analyze the salary tax evolution, we can notice that the decline of the tax wedge on the labour income is due to the decrease of the social contribution rates, as well as of the tax rates of the natural persons' income. The tax wedge is calculated by dividing the payroll tax, the social contributions paid by the employee and by the employer and other taxes to the total labour cost. The tax wedge supported by the employee and bt the employer for the labour force is quite high in the European Union and this represents one of the main causes for the poor performance concerning employment in the European Union.

**Figure 2. The structure of the tax wedge – the level of labour taxation in 2008
(Implicit tax rate on Labour)(%)**



Source: European Commission, *Taxation trends in European Union, “Data for the EU member states, Iceland and Norway”, 2010, p. 110*

If we analyze the structure of labour taxation in the European Union, we can notice that its largest share is represented by the employer’s compulsory social contributions, closely followed by the payroll taxes and the employee’s social contributions.

Thus, in Denmark, Ireland and Great Britain, the largest share of the tax wedge on the labour income is represented by the payroll taxes and in states like Romania, Slovakia, Greece, the largest share is represented by the social contributions, the payroll tax representing less than 20%. The labour tax and the social contributions attenuate the economic fluctuations by decreasing the available income volatility. In many member states, the progressive character of the payroll taxes is often compensated by the regressive system of compulsory social contributions. The diminution of the tax wedge for the low wages increased the progressiveness of the tax wedge in the member states. The majority of the member states collect taxes on the natural persons progressive income. Seven member states apply progressive tax rates on the natural persons’ income: Czech Republic, Bulgaria, Estonia, Latvia, Lithuania, Romania, Slovakia.

Table 1. The tax wedge on labour income – single worker with average income (% of the labour cost) in 2009

Country	Tax wedge	Income tax	Employee SSC	Employer SSC	Tax wedge	Income tax	Employee SSC	Employer SSC
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Belgium	55.2	21.1	10.7	23.3	-0.54	-0.50	0.00	-0.04
Hungary	53.4	15.9	12.8	24.6	-0.72	0.11	0.17	-1.00
Germany	50.9	17.3	17.3	16.3	-0.57	-0.52	-0.03	-0.03
France	49.2	9.9	9.6	29.7	-0.05	-0.05	0.00	0.00
Austria	47.9	12.1	14.8	17.8	-0.91	-1.05	-0.02	0.10
Italy	46.5	15.0	7.2	24.3	-0.03	-0.03	0.00	0.00
Sweden	43.2	13.9	5.3	23.9	-1.65	-1.11	0.04	-0.57
Slovenia	42.9	9.3	18.9	14.7	-0.52	-0.20	0.00	0.30
Finland	42.4	18.6	5.1	18.7	-1.39	-0.88	0.14	-0.66
Czech Republic	41.9	8.3	8.2	25.4	-1.55	0.05	-1.05	-0.55
Romania	41.7	8.8	12.3	20.6	-1.65	0.31	-1.03	-0.93
Lithuania	41.7	15.6	2.3	23.8	-1.38	-1.38	0.00	0.00
Latvia	41.6	14.9	7.3	19.4	-0.81	-0.81	0.00	0.00
Greece	41.5	7.1	12.5	21.9	-0.06	-0.06	0.00	0.00
Estonia	39.5	12.6	2.0	25.0	-0.56	-0.56	0.00	0.00
Denmark	39.4	29.1	10.3	0.0	-1.28	-1.25	-0.03	0.00
Spain	38.2	10.3	4.9	23.0	0.19	0.33	0.01	-0.15
Netherlands	38.0	15.1	13.8	9.1	-0.96	1.18	-1.86	-0.29
Slovak Republic	37.6	6.3	10.6	20.8	-1.17	-1.17	0.00	0.00
Portugal	37.2	9.1	8.9	19.2	-0.07	-0.07	0.00	0.00
Bulgaria	35.1	7.2	10.8	17.1	-1.37	0.27	0.78	-2.42
Poland	34.0	5.6	15.5	12.9	-0.52	-0.52	0.00	0.00
Luxembourg	34.0	12.7	10.9	10.3	-1.16	-1.59	0.08	0.35
United Kingdom	32.5	14.6	8.3	9.6	-0.34	-0.21	-0.06	-0.07
Ireland	28.6	12.9	6.0	9.7	1.54	0.35	1.18	0.00
Malta	22.8	8.7	7.0	7.0	-0.81	-0.07	-0.74	0.00
Cyprus	13.9	2.1	5.9	5.9	-0.21	-0.21	0.00	0.00
EU27	39.7	12.4	9.6	17.6	-0.69	-0.36	-0.09	-0.22

Source: European Commission, *Taxation Papers, Monitoring tax revenues and tax reforms in EU Member States 2010, “Tax policy after the crisis”, Working Paper nr. 24, 2010, pp. 84*

A research conducted by the World Bank in eight member states: Czech Republic, Estonia, Latvia, Lithuania, Poland, Slovakia and Slovenia concerning the relationship between the tax wedge on labour income and the employment level revealed that there is an inverse relationship between the tax wedge and employment. It was also revealed that the labour force structure – with many unskilled workers, compulsory minimum wages, high level of labour taxation and progressive fiscal systems have worse effects on employment than in the rest of the European Union member states. (World Bank, EU-8 Quarterly Economic Report, 2005:12).

In the case of low-wages category, it is important to analyze the stimulants offered by the employees. In this respect, two indicators were developed: *the effective marginal tax rate* and *the effective average tax rate*, in order to study the effect of wage modifications. If the first rate takes into account the marginal modification of salary income, the second takes into account the salary changes implicit to the transition from unemployed to employed. The effective average tax rate is a specific concept of unemployment or inactivity; it is used to monitor the labour market distortions, especially regarding financial constraints in order to gain access to a job.

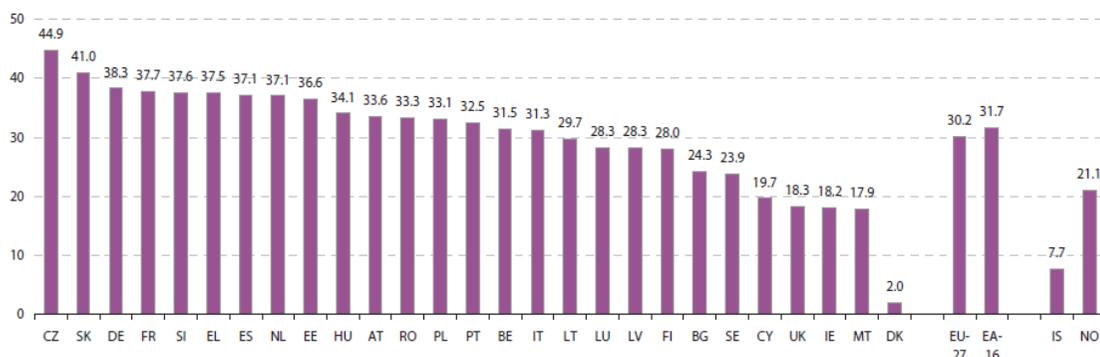
It is also obvious that an increase of the tax wedge has a stronger negative effect on the employment level in the case of workers with a lower qualification level. A research conducted in Belgium, Holland and France confirms this observation since a decrease of fiscality for the low-income workers led to a considerable increase of the employment level.

3. Aspects regarding the importance of compulsory social contributions to the formation of public income in the EU

The share of fiscal revenues from direct taxes, indirect taxes and social contributions is relatively close in the old member states of the European Union in comparison with the new member states, which register a lower level of income from direct taxes. The low level of income from direct taxes is compensated by more significant shares of the social contributions or indirect taxes. While in some states such as Bulgaria, Romania, Malta and Cyprus the most significant share of the budgetary income is represented by the income from indirect taxes, in other states like Czech Republic, Slovakia, Germany and France, the income from social contributions is high. At the opposite side are Denmark, Ireland and Great Britain, states which collect relatively low income from social contributions. The motivation for the very low level of social contributions in Denmark is the fact that its social expenditures are not financed by the social insurance budgets, but by income from general taxes. This explains the very high level of direct taxes, one of the highest in the European Union.

If we analyze the evolution of the budgetary income, we can notice that in time most of the states changed the structure of the budgetary income. For example, in case of Latvia and Slovenia, the increase of the share of the direct taxes was compensated by a decrease of the social contributions and of indirect taxes. In Sweden, the increase of the share of indirect taxes meant a decrease of the share of direct taxes and social contributions in the total income. In Greece, the decline of direct and indirect taxes was completed by an increase of the social contributions rates.

Figure 3. The share of social contributions in the total tax wedge (%) in 2008



Source: European Commission, *Taxation trends in European Union, "Data for the EU member states, Iceland and Norway"*, 2010, p. 68

In Austria, the most important share of the tax wedge is represented by the social contributions. The social contributions rate supported by the employees is approximately 18%, the social contributions rate supported by the employer is 21.5%, and in case of income earned out of independent activities, the social contribution rate is 25%.

In 2010, the total social contributions collected in Bulgaria reached almost 28.5% of the income, out of which the most important part was represented by the contributions to social insurances – pensions – which decreased in 2010 from 18% to 16%, decrease compensated by an increase of the direct tax rates.

In Czech Republic, the most important source of budgetary income is represented by the social contributions (44.9% of the total collected income). The level of income from social contributions is the highest of the European Union, followed by Slovakia and Germany. Taking into account this aspect, the income from direct and indirect taxes is under the European Union average. The social contribution rate owed by the employees is 11%, out of which 6.5% for the social insurances – pensions and 6.5% for social health insurances. The social contributions rate owed by the employer is 34% of the gross income. In Finland, the social contributions level owed by the employer is 28%.

The level of social contributions owed by the employer registered in France in 2008 was the second in the European Union after Czech Republic. The social contribution rate owed by the employer is high in France, amounting to 35%-45% of the income in comparison with the contributions owed by the employees which amounts to 14% (European Commission, *Taxation trends in European Union, 2010: p. 160-272*).

In Sweden, the social contributions have the lowest share in the total budgetary income. In Sweden, most of the social contributions is paid by the employers (31.42%). The employees pay an additional rate of 7% for the social insurances. In order to facilitate youth employment, the employers benefit from a reduced rate of social insurance for people under 26.

In Ireland, the share of social contributions to the total income is not significant – only 18.2% because of the very low level of labour taxation in comparison to the European Union average. The increase of labour tax rate starting with 2000 was balanced by the decrease of the social contributions level. The contribution paid by the employers is 10.75%, with a reduced rate of 8.5% for those with low income (lower than 352 euros per week) and the contribution supported by the employees is 4% of the gross income. Given the very low level of social contributions rate in Great Britain, the income from this source represents a small share of the total budgetary income.

In Malta, the level of social contributions is very low, much under the European Union average. The income from this source had a declining evolution during the period 2000-2008, registering

the lowest level of all the member states. The workers of Malta, the employers and the government contribute equally to the social security fund with 10% of the basic salary.

In Holland, the three important sources in the income formation have equal shares. The social security system is composed of the public insurance and the employees' insurance. The first category is financed by all the members of the society, while the second category is supported by the employers according to the economic sector in which they work. The employees' social contributions rates are identical to those of the employers.

Romania is the fourth country in terms of the importance of income from direct taxes to the total budgetary income after Bulgaria, Cyprus, Malta. In 2008, the level of budgetary income increased with almost 29% in comparison with 2007. This increase of public income came from the increase of income from: income tax -23.6%, natural persons' income tax - 27.8%, VAT - 30.8%, excises - 8.7% and social contributions - 24.7% (Mara Eugenia Ramona, Inceu Adrian, Cuceu Ionuț, Achim Monica Violeta, 2009: 3). This confirms the importance of social contributions to the formation of public income. The obligation to pay the rate of social insurance belongs to the employer (20.8%) and to the employee (10.5%) in normal working conditions. If the employee develops his activity in higher risk conditions, the contribution rate paid by the employer increases by 5%; for particular working conditions the total contributions rate is 36.3% and for special working conditions, the total contributions rate is 41.3%.

Examining in general the main sources of budgetary income formation in the European Union in 2008, we can notice a quite balanced situation, the social contributions having the smallest share in the total income (12.6% of GDP), in comparison with the direct taxes (13.5% of GDP) and the indirect taxes (31.4% of GDP).

4. Conclusions

In the current context of the financial crisis it is absolutely necessary to compare the evolution of labour fiscality and the effect of the growth of public debts on the tax wedge on labour income. In a research conducted by the European Central Bank, it was revealed that in the majority of the states which registered an increased of the public debt, the labour taxation increased - Greece, Italy and France being relevant examples in this respect.

Despite the fact that some states have low labour taxes, the labour fiscality remains high in the European Union in comparison with other industrialized economies. The increase of the fiscality level for the labour income determines the decrease of the employment rate and the raise of the unemployment rate. The solution to guarantee a higher employment rate could be the relaxation of the labour fiscality. Some specialists consider that fiscal neutrality in the field of labour fiscality could be realized by transferring the tax wedge on the labour income towards property or energy taxation.

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BASES OF STATE SUPERIOR EDUCATIONAL SYSTEM FINANCING FROM ROMANIA

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This study concerning state superior educational system financing comes to emphasize the main state superior educational system financing forms from Romania, looking forward to find new future state superior educational system financing forms. Romanian educational system reduced financing imposes a special attention for educational process, concerning both quality and, especially, an appropriate financing level endowment. For the future of academic education, it is vital to be found new financing sources, because a composite, diversified financing leads to the raise of total amount of resources at the service of universities, to their freedom degree, too, making them capable to undertake the constraint imposed by the dependence of a solely financing source.

Keywords: the financing of the academic education, private funds financing, public fund financing, public funds usage surveillance.

JEL classification: I22

Introduction

According to Law of national education, no. 1 from January 5th, 2011, the state superior educational system incomes are composed by sums allocated by Education Ministry budget, according to a contract, for the basic financing, complementary and supplementary financing, investments objectives accomplishing, competition basis allocated funds for institutional development, competition basis allocated funds for inclusion, scholarships and students' social protection as well as own incomes, rates of interest, donations, sponsorships and fees legally perceived from individuals or companies, aboriginal or from above, or another sources, too. These incomes are used by superior educational system institutions, on university autonomy conditions, in order to accomplish their dedicated objectives because of the state policies on the field of education and university scientific research.

1. State superior educational system institutions public funds financing

Financing inside the superior educational institutions is accomplished in the context of university autonomy and it is also materialized in their rights of managing, according the laws, the funds allocated from the national budget or the ones coming from another sources, too, in accordance to the criteria commonly agreed with the Ministry (M.E.C.T.S.).

State superior educational system financing is ensured from public funds, according to the following requirements⁶²:

- superior educational system development to be considered as a public responsibility and the educational system, generally, to be considered as a national priority;

⁶²

- superior education quality to be ensured on the level of standards from European Space of Superior Education for human resources preparation and personal development as citizens of a democratic society based on knowledge;
- human resources to be proficient according to the labor market diversification;
- superior educational system development, scientific research and artistic university creation development for the top integration on the world scientific level.

Basic financing is to be insured according to the number of admitted students on the form of budget study, as well as according to another indicators specific to education activity, especially the one referring to the quality of performance in education. Basic financing is multi-annual, it is ensured on the entire period of a study series.

State superior educational system institutions basic financing is performed due to a *institutional contract*, agreed between the Ministry of Education, Research, Youth and Sports and the superior education institution.

The Ministry of Education, Research, Youth and Sports will ensure the basic financing for the public universities, by study grants, based on the average costs equivalent per student per domain, on study series and on teaching language. The study grants will be priority awarded to those domains that ensure the supportive and competitive society development, but, inside the domain, priority for the best placed programs o their quality hierarchy, the number of study grants assigned for a program, which vary on the position of the program in this hierarchy. The received grants will be managed by universities according to their own terms.

The national budget funds for basic financing are differentially assigned for superior educational institutions according to the following criteria:

- number of students unitary equivalents (70%);
- qualitative indicators (17 indicators structured in 5 groups) determined for each university (30%).

On the institutional contract agreed between the university and the Ministry (MECTS) there are stipulated, along with basic financing, the sums assigned from national budget for scholarships and students' social protection as well as the sums assigned for investments achievement.

The number of student unitary equivalents are calculated, for every single university and every single educational domain, as it follows::

$$SEU^U = \sum_{d=1}^D C_d * SE^U_d \quad (1)$$

where:

SEU^U = number of students unitary equivalents of the U university;

C_d = cost coefficient corresponding to educational domain d;

SE^U_d = number of students from D domain of U university;

D = total number of educational domains financed from the national budget.

The allowances from the national budget concerning basic financing are guided from the title of "Transfers"; they represent a pay form for a service performed (school-house for a number of students agreed with the MECTS).

Complementary financing is awarded by the Ministry of Education, Research, Youth and Sports by: accommodation and meal subventions, funds allowed on priorities and specific standards for endowments and another investments and capital restorations; funds allowed n competitive basis for university scientific research.

Complementary financing is awarded on competitive basis, due to a *complementary basis*, the sums are to be directed to investments and capital restorations, to cover some didactic

equipments endowment and research expenditures or some development projects (new specializations, new education forms), and also for some scientific research projects financing. *Supplementary financing* is awarded from public funds by the Ministry of Education, Research, Youth and Sports in order to stimulate the excellence of institutions or study programs from the universities. This is awarded for the universities, for a sum, on national level, of minimum 30% from the sum allowed on national level to the state universities as basic financing, upon the criteria and quality standards agreed by the National Council of Superior Education Financing and approved by the Ministry of Education, Research, Youth and Sports.

2.State superior education institutions private funds financing

Regarding to national strategies, the changes performed by the reforms from many countries have tried to increase superior education institutions autonomy concerning financial management and, especially, private funds usage and gathering.

State superior education institutions from Romania may perceive examination fees in case of the students who are not sustained by the state. The value of school-house fees is established by the university Senate, according the laws.

Besides the school-house fees, there is the alternative of a large scale of sources for state superior education institutions private financing.

The sources for private funds available for public institutions are the following ones:

- donations and legacies;
- loans;
- rents and incomes from positions sponsorships;
- usage of research results / research based on a contract;
- payments for different performed services;
- rate of interest on investments;
- private commercial companies foundation.

If there are some restrictions regarding certain financing forms (private commercial companies foundation, rate of interest on investments, loans), the Romanian state will authorize all the private income sources mentioned above.

Research contracts under she form of common research projects between superior education institutions and contractor private entities represents the most well known private financing source.

Services performing as it may be the adult permanent education, classes for the employees from different companies, consulting services and events organization, they all represent another important source of private financing.

State superior education institutions from Romania are allowed to *found commercial companies*, but didn't yet happen. Commercial spaces renting or another facilities renting represent another income source for state universities.

State universities from Romania have the right to get and to receive loans.

Partnerships with the private sector, local or regional authorities represent for the state superior education institutions from Romania an important financing source for their increasing incomes, representing a way of transfer for the research and results of academic research commercialization.

In order to encourage such partnership achievements, the state may allow certain incentives for superior education institutions and/or private cooperating entities. This kind of incentives may appear as: superior education institutions tax releases; donors, sponsors or private partners tax releases; private sectors partnership financial support or another kind of support; regulations that allow institutions to own intellectual property; budget financing influence or evaluation influence.

In Romania, there are accorded tax releases for state superior education institutions donors and sponsors. In case of research activities financed by public funds, the real owners are the superior education institutions and the Ministry of Education, Research, Youth and Sports, except for the situation when the research contract provides something different.

Private funds attracted by state superior education institutions are used in order to co-finance some objectives stipulated in the institutional strategic plan.

3.The control of superior education institutions allocated funds usage

Although the superior education institutions are autonomies, they are supposed to be controlled because they represent public services providers and they benefit from public funds.

The control represents a clear stage of budgetary process. It appears in every stage of budgetary process, especially during the process execution.

The manner of control in the specific situations when superior education institutions use the allocated funds is accomplished in order to avoid dissipations, embezzlements or peculations.

Public Finance Ministry specialized authorities are checking the way that national budget received funds have been used, the accuracy and the reality of the data in the records of public institutions and the way of funds management and usage.

The public, but especially superior education institutions financiers have their own proper interest of having knowledge about what it is happening in those institutions.

An annual report in our country is mandatory; it is usually prepared and presented to the Minister by the superior education institution Rector. Although many of the annual reports include information about institutional project, they are mainly used as a superior education institutions responsibility instrument.

Our country annual report about the activity of superior education institutions is an essential document for superior education institutions financing, which includes information about accomplished objectives, registration data, teaching and administrative positions data, institutional budget data, facilities, research projects, publications, international relations, consulting and direction, experimental units, etc..

Superior education institutions from Romania are responsible for public funds usage through a link accorded between a part of allocated funds and institutions results. It breaks consideration for performance indicators in the financing formulas used to calculate the global public subventions and/or research indicators results for certain subventions accomplished for that specific research.

Another way of superior education institutions surveillance is represented by the strategic institutional plans. These plans constitute an alternative of institutional achievements measurement. In case of a superior education institutions from Romania, the strategic plans are included in the performance contract for public funds allowance.

Conclusions

Actually, Romanian universities capacity of another financing source attraction, besides the study fees, is very reduced, meanwhile global financing system didn't solve the problem of superior education financing and it won't solve it without involvement from universities and without a performance management.

Romanian education reduced financing from private sources imposes an increased attention for educational process, as well for quality, as it is a financing proper degree insurance.

We remind here some main recommendations concerning state superior educational system financing from Romania:

- remission of the two categories of existing students in the actual state superior educational system (who are paying school-house fees or who are financed from the budget) and the

introduction of mandatory individual contribution for all the students concerning superior education costs. This new study fee system, lower, but equitably paid, by all the students, could represent a solution for the extra-budgetary financing increase. The sum representing individual contribution will be established due to the student's performance;

- achievement of some partnerships between universities and economic agents, which allow to certain companies to sustain a part of students' study fees, with the condition that the student financed by an economic agent to be employed by the financing company at the end of the studies with a lower salary than the appropriate until the student will pay the entire loaned sum and also the rate of interest for the loan awarded by the economic agent;
- partnerships between universities and economic agents agreed for human resources formation common financing, may be also achieved in cooperation with local authorities and the rooms of commerce and industry in order to sustain local economy development;
- the state will continue to finance superior education (on the form of study subventions), because individual subvention doesn't have to substitute, but to add itself to superior education subventions from the state budget;
- encouragement of university research, as a source of innovation and education financing;
- contribution of enterprises on superior education institutions financing. This embraces two forms: research contracts, services provided, material conditions insurance for training stages, donations: a legally form (based on the example of Delaure Law, from France, which forces the enterprises with a high number of employees to direction a certain percent from the salary amount to the state, with the mention *adult permanent education*).

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THE FLAT TAX – A COMPARATIVE STUDY OF THE EXISTING MODELS

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In the two last decades the flat tax systems have spread all around the globe from East and Central Europe to Asia and Central America. Many specialists consider this phenomenon a real fiscal revolution, but others see it as a mistake as long as the new systems are just a feint of the true flat tax designed by the famous Stanford University professors Robert Hall and Alvin Rabushka. In this context this paper tries to determine which of the existing flat tax systems resemble the true flat tax model by comparing and contrasting their main characteristics with the features of the model proposed by Hall and Rabushka. The research also underlines the common features and the differences between the existing models. The idea of this kind of study is not really new, others have done it but the comparison was limited to one country. For example Emil Kalchev from New Bulgarian University has asses the Bulgarian income system, by comparing it with the flat tax and concluding that taxation in Bulgaria is not simple, neutral and non-distortive. Our research is based on several case studies and on compare and contrast qualitative and quantitative methods. The study starts form the fiscal design drawn by the two American professors in the book “The Flat Tax”. Four main characteristics of the flat tax system were chosen in order to build the comparison: fiscal design, simplicity, avoidance of double taxation and uniformity of the tax rates. The jurisdictions chosen for the case study are countries all around the globe with fiscal systems which are considered flat tax systems.

The results obtained show that the fiscal design of Hong Kong is the only flat tax model which is built following an economic logic and not a legal sense, being in the same time a simple and transparent system. Others countries as Slovakia, Albania, Macedonia in Central and Eastern Europe fulfill the requirement regarding the uniformity of taxation. Other jurisdictions avoid the double taxation but they have several tax rates for different types of income. Analyzing the flat tax jurisdiction we concluded that none of the existing models is a true flat tax as designed by Hall and Rabushka.

The study is important given the fact that it can provide useful information for future studies in connecting the effects generated by the adoption of flat tax with the design of the system. This can give intelligence for the exiting models in correcting and improving their features in order to become more efficient. This can also provide precious design information for the jurisdictions desirous of implementing flat tax systems.

The added value of this paperwork consists in the determination of the main features of the existing flat tax systems in relation with the theoretical system designed by Hall and Rabushka and in the fact that it provides precious structured information for future studies allowing to connect the effects of the flat fiscal model with its characteristics.

Keywords: flat tax, simplicity, uniformity, rates

JEL Codes: H20, H24, H25

1. Introduction

Over the last two decades the flat tax became a real fiscal phenomenon. Many countries in transition, but also developed jurisdictions all over the world have adopted this system in order to give their economies an impetus.

Along with the idea of a flat tax have appeared the theories which advocate this system and also the theories which show that it does not represent a viable solution. The pro and cons of the flat tax system are not yet exhausted, theorists, practitioners, politicians and even journalists worldwide try to determine the social, fiscal and economic efficiency of this construction.

The debate over the flat tax is yet concentrated on rhetoric arguments and is based on assertion rather than analysis and evidences.

The present global economic crisis has brought to viewfinder the problem of finding fiscal solutions in order to overcome the social and economic negative effects of the crisis. With this occasion the flat tax system became an important spark discussion point. Some economists blamed the flat tax idea, trying to demonstrate that these systems represent one of the indirect, yet important, causes of the international economic crisis because of their character which generates inequities and social bias. More than that, some specialists consider the flat tax is the main cause of the financial problems in the Baltic region. Yet no country which adopted a flat tax, less Iceland, has given up this fiscal construction.

In the modern world there are no perfect fiscal systems, but improving the existing ones is goal for any jurisdiction. More over, it is well known that fair taxes are not efficient and efficient taxes are not fair. Although the recipe for the perfect taxing system was not found in terms of fairness and efficiency, our study tries to bring a small contribution to the diagnosis and improvement of the existing flat tax system.

The specific objectives of this research are:

- Determining the common elements and the differences between the existing flat tax models:
- Generating research assumptions which may represent the leading point for future research studies.

2. The Flat Tax of Hall and Rabushka

We began our research from the “Bible” of the flat tax, the book “The Flat Tax” written by Robert Hall and Alvin Rabushka in 1985. In this work the two American professors define the flat tax system by drawing its main features.

The flat tax is a very simple consumption tax system. Following not a legal sense, as other tax systems, but economic logic the integrated flat tax design is utmost simple – its two tax forms fits on postcards. The income is divided in two categories: individual wage tax, which includes wages, salaries and pensions, and business income which include all other types of income. The taxation for individual wage tax is made using a single form which fits a postcard:

Form 1		Individual Wage Tax		1998
Your first name and initial (if joint return, also give spouse's name and initial)		Last name		Your social security number
Present home address (number and street including apartment number or rural route)			Spouse's social security number	
City, town, or post office, state, and ZIP code			Your occupation™	
			Spouse's occupation™	
1	Wages and salary.....	1		
2	Pension and retirement benefits.....	2		
3	Total compensation (line 1 plus line 2).....	3		
4	Personal allowance			
	(a) <input type="checkbox"/> \$16,500 for married filing jointly.....	4(a)		
	(b) <input type="checkbox"/> \$9,500 for single.....	4(b)		
	(c) <input type="checkbox"/> \$14,000 for single head of household.....	4(c)		
5	Number of dependents, not including spouse.....	5		
6	Personal allowances for dependents (line 5 multiplied by \$4,500).....	6		
7	Total personal allowances (line 4 plus line 6).....	7		
8	Taxable compensation (line 3 less line 7, if positive; otherwise zero).....	8		
9	Tax (19% of line 8).....	9		
10	Tax withheld by employer.....	10		
11	Tax due (line 9 less line 10, if positive).....	11		
12	Refund due (line 10 less line 9, if positive).....	12		

Figure 1: Individual wage – tax form

Source: Hall and Rabushka 2007: 94

The business tax is a giant, comprehensive withholding tax on all types of personal income other than wages, salaries, and pensions, but the taxation is also made using a very simple form:

Form 2		Business Tax		1998
Business name		Employer identification number		
Street address		County		
City, state, and ZIP code		Principal product		
1	Gross revenue from sales.....	1		
2	Allowable costs			
	(a) Purchases of goods, services, and materials.....	2(a)		
	(b) Wages, salaries, and pensions.....	2(b)		
	(c) Purchases of capital equipment, structures, and land.....	2(c)		
3	Total allowable costs (sum of lines 2(a), 2(b), 2(c)).....	3		
4	Taxable income (line 1 less line 3).....	4		
5	Tax (19% of line 4).....	5		
6	Carry-forward from 1997.....	6		
7	Interest on carry-forward (6% of line 6).....	7		
8	Carry-forward into 1998 (line 6 plus line 7).....	8		
9	Tax due (line 5 less line 8, if positive).....	9		
10	Carry-forward to 1999 (line 8 less line 5, if positive).....	10		

Figure 2: Business wage – tax form

Source: Hall and Rabushka 2007: 94.

Another important feature of the flat tax defined by Hall and Rabushka is that it taxes once and only once all types of income.

The flat tax also means that business income and worker income are taxed at the same single tax rate.

3. Methodology

This paper represents a scientific approach focused on relevant case studies in the area of flat tax constructions research. This systemic and comparative research starts from the theoretical flat tax model designed by Robert Hall and Alvin Rabushka in 1985.

In the research process four main characteristics of the theoretical model are selected in order to build the comparison:

- simplicity;
- fiscal design;
- avoidance of double taxation;
- tax rates uniformity.

Through these characteristics, the similarities and the differences between the flat tax systems in different jurisdictions of the world are found. For a systemic approach the jurisdictions are analyzed grouped in regions. For each region were selected the most relevant cases for our research.

In the first place the flat tax systems from Asia are analyzed. For the comparison with the theoretical model was chosen Hang Kong, taking into consideration the age and the performances of this fiscal construction.

The flat tax systems from Eastern and Central Europe are also studied. The flat tax became a part of the fiscal landscape of the ex-communist countries since 1994 when Estonia adopted a flat tax. The idea spread rapidly, countries like Lithuania, Latvia, Russia, Serbia, Slovakia, Ukraine, Georgia, Romania, Albania, Macedonia, Monte Negro, Bulgaria, Czech Republic, Slovakia and Hungary have also adopted this type of system.

The issue regarding the flat tax is also studied for Western European Countries. The fiscal design of Guernsey and Jersey, two of the oldest flat tax systems in the world, are compared with the theoretical model. In Western Europe we find the first country in the world which gave up the flat tax construction.

The American continent has also some jurisdictions with flat tax systems: Paraguay and Jamaica.

4. Results

4.1 The Flat Tax in Asia

In Asia there are six countries which have a flat tax system: Hong Kong, Mongolia, Turkmenistan, Kyrgyzstan, Kazakhstan and Iraq. Hong Kong flat tax was adopted in 1947 and is one of the most efficient fiscal systems in the world taking into consideration the fact that the budget of this jurisdiction was on surplus for decades on a row.

Comparing the flat tax constructions of these countries with the model designed by Hall and Rabushka, some differences and similarities appear.

In terms of simplicity Hong Kong is the champion. The taxpayers declare their income once a year and there is no withholding tax so the each person, business or individual has to declare his or hers income.

In the other five countries the systems are not that simple, the fiscal tasks are more complex and appear more often.

The Hong Kong fiscal design resembles the design proposed by Hall and Rabushka. The treatment of the income in this Chinese jurisdiction follows an economic logic and not a legal sense, so that income is divided in wages income and business income. The other Asian states treat the different types of income from a judicial point of view.

Avoiding double taxation is an accomplished rule in Hong Kong as long as dividends and capital gains are not taxed.

Analyzing the tax rates in Hong Kong one can see that there is a difference of 1.5% between the tax rate used for taxing business income and the tax rate for wages, salaries and pensions. There is also an important legal foresight regarding the salaries under a certain ceiling: one can choose between a progressive taxation with rates ranging from 2% to 17% and a proportional taxation. But this progressive taxation can be interpreted as a system of allowances for the poorer taxpayers.

In Mongolia the taxation is made using a uniform rate for personal income and two tax rates for the profit. In Turkmenistan, Kyrgyzstan and Kazakhstan the uniformity of the rates is verified only for personal income.

4.2 The Flat Tax in Eastern and Central Europe

In the last two decades many of the ex-communist European countries have adopted flat tax systems. The first one was Estonia in 1994 and many others follow: Lithuania in 1995, Latvia in 1997, Russia in 2001, Serbia in 2003, Slovakia and Ukraine in 2004, Georgia and Romania in 2005, Macedonia and Montenegro in 2006, Czech Republic in 2007, Belarus, Albania and Bulgaria in 2008 and Hungary in 2011.

The fiscal design of the flat tax countries in Central and Eastern Europe is still a complex one. Unlike the flat tax, the separation of both taxation structures in all the countries of this region does not follow economic logic, but a legal sense, generating complications and double regulation of business income.

In terms of avoiding double taxation there are just a few countries like Slovakia and Serbia that comply with this rule. The other countries in the region tax dividends and/or capital gains, generating double taxation. This is the case of the Czech Republic, Bulgaria, Romania, Belarus, Montenegro, Macedonia and many others.

The uniformity of the tax rates is the most important feature of a flat tax system. This characteristic is accomplished by Estonia, Slovakia, Albania, Macedonia, and Montenegro.

4.3 The Flat Tax in Western Europe

Western Europe remains an impenetrable redoubt for the flat tax. The only two jurisdictions in this region which have adopted a flat tax system are Guernsey and Jersey, also known as the Channel Islands.

The fiscal systems from the two islands are relatively simple. Their simplicity comes from the uniformity of the tax rates used for all kinds of income, but the declaration procedure is classic.

The fiscal treatment of the revenues is made by classifying the income using classic legal principles and not economic rules. For example in Guernsey the income is divided into wages and salaries, dividends, interests, income of sole proprietors and corporate income.

Double taxation is a reality in these jurisdictions, as income from dividend is taxed both in Guernsey and Jersey.

Taxing in the Channel Islands is made uniformly. There is an exception in Jersey where the income of the companies from the financial sector is taxed with a rate of 10%, while all the other types of income are taxed with 20%.

4.4 The Flat Tax on the American Continent

There are two major countries in Central and South America which have embraced the flat tax idea: Paraguay and Jamaica. Until 2010 in Paraguay the personal income was not taxed. Starting 1st January 2010 the personal income is taxed with a rate of 10%, the same tax rate used for corporate income.

Jamaica adopted a flat tax in 1986. In 2010 Jamaica introduced a progressive taxing system for personal income, but the authorities from this state readopted a fat tax in March 2011.

The Jamaican and the Paraguayan fiscal systems are far from resembling the flat tax system designed by Hall and Rabushka. These systems are not simple; their complexity is being reflected by the diversity of tax rates used for imposing different types of income. The rule regarding the avoidance of double taxation is violated by taxing the dividends in both countries. The classification of the revenues in these American jurisdictions is made following a legal logic and not an economic sense.

5. Conclusions

Analyzing the flat tax systems by comparing and contrasting them with the fiscal model designed by Hall and Rabushka, we obtained some interesting results.

The comparative study shows that the differences between the theoretical flat tax model and the existing flat tax constructions are the rule, whereas similarities are rather the exception.

The fiscal constructions became simpler by adopting the flat tax, especially because the rates become uniform for the all types of income and the taxing procedure is easier to perform. But none of the flat tax jurisdictions analyzed is as simple as the theoretical model.

The general design of the flat tax systems in Europe, Asia and America is based on legal principles and not on economic fundamentals as the flat tax of Hall and Rabushka. The exception is represented by the Hong Kong flat tax model, which is the only fiscal construction in the world following an economic logic.

Some countries have uniform tax rates for all types of income, but others use flat rates only for personal income.

Avoiding double taxation is a principle often violated by the majority of the flat tax countries, excepting Hong Kong and a few jurisdictions from Europe.

All in all we can conclude that there is no fiscal construction in the world which goes all the way with the theoretical model design by the two famous American professors. Yet the system that resembles the most the theoretical construction is the one of Hong Kong. But the questions that remain are which of the existing models are the most efficient ones and which are their characteristics generating the desired economic and social effects.

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SUB-SECTION: BANKING

COMPETITION IN ROMANIAN BANKING SECTOR

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Recent turmoil in the global financial system has impacted severely on the banking sector with many banks suffering large losses and necessitating the need to raise additional capital privately or through their respective national governments. In our study we investigate the impact of structural reforms performed throughout the European Union (EU) accession process on competition and contestability of banking systems in Romania.

The literature of the measurement of competition can be divided into two major approaches: structural and non-structural. The structural approach to the assessment of competition embraces the „Structure-Conduct-Performance Hypothesis” (SCP) and the „Efficient Structure Hypothesis” (ESH). The structural approach, as the name suggests, assesses bank competition by examining measures of market structure such as concentration ratios (the share of assets held by the top 3 or 5 institutions) or indices (e.g., the Herfindhal-Hirschman index) and supposes that higher concentration in the banking market causes less competitive bank conduct and leads to higher bank profitability. The SCP model is originally developed by Bain (1956). The second approach, ESH, developed by Demsetz (1973) and Peltzmann (1977) suggests that the superior performance of the market leaders determines the market structure, implying that higher efficiency produces both higher concentration and greater profitability. The non-structural indicators of competition are mainly based on the measures of monopoly power developed by Lerner (1934). The Lerner Index suggests the mark-up of price over marginal cost. An alternative non-structural indicator of the degree of market competition is the Panzar and Rosse (1987) H-statistic. The H-statistic measures the extent to which changes in banking costs are reflected in changes in banking revenues.

In order to examine the level of competition and market power of banks in Romania for period 2003 – 2009, we estimate the non-structural indicators and compare it with the structural indicators of competition.

In particular, we measure competition using Lerner index and the H-statistic, indicators what are estimated using bank-level data and are compared with a standard market structure measure of concentration like HHI and CR5. There are no other studies that measure both structural and non-structural competition indicators for Romanian banking sector. Also, our assessment contains a period of seven years including the begging of the implications of the present international financial crises on Romanian banking sector.

The structural indicators show continuous increase of competition in the Romanian banking system. Lerner index and H statistic demonstrate that Romanian banking system is characterized by monopolistic competition and relatively competitive practices. Personnel cost, operational cost and financial cost are statistically significant at conventional levels, which imply good fit of the revenue equations. The results also demonstrate that excess fixed assets do not generate abnormal revenue.

Keywords: bank competition, Lerner index, H statistic, structural indicators, Romanian banking system

JEL classification: G21; L11

1. Introduction

In recent years due to reform process, what involved an ample process of liberalization, privatization and recapitalization of the banking sector, the analysis of the competition of banking sectors in transition countries from Central and Eastern European countries has received much consideration. In our study we investigate the impact of structural reforms performed throughout the European Union (EU) accession process on competition and contestability of banking systems in Romania. Recent turmoil in the global financial system has impacted severely on the banking sector with many banks suffering large losses and necessitating the need to raise additional capital privately or through their respective national governments. The failure of investors, depositors, and supervisors to appropriately discipline banks have led academics and policy-makers to re-consider the links between bank performance, risk and changes in the competitive environment. Moreover, in recent years, indicators of banking competition had been used by researchers to explain performance and risk differentials across banks.

2. Literature review

The literature of the measurement of competition can be divided into two major approaches: structural and non-structural. The structural approach to the assessment of competition embraces the „Structure-Conduct-Performance Hypothesis” (SCP) and the „Efficient Structure Hypothesis” (ESH). The structural approach, as the name suggests, assesses bank competition by examining measures of market structure such as concentration ratios (the share of assets held by the top 3 or 5 institutions) or indices (e.g., the Herfindhal-Hirschman index) and supposes that higher concentration in the banking market causes less competitive bank conduct and leads to higher bank profitability. The SCP model is originally developed by Bain (1956).

The second approach, ESH, developed by Demsetz (1973) and Peltzmann (1977) suggests that the superior performance of the market leaders determines the market structure, implying that higher efficiency produces both higher concentration and greater profitability. "Non-structural models" do not infer the competitive conduct of banks through the analysis of market structure. The New Empirical Industrial Organization approach rather recognizes that banks behave differently depending on the market structure in which they operate. The non-structural indicators of competition are mainly based on the measures of monopoly power developed by Lerner (1934). The Lerner Index suggests the mark-up of price over marginal cost. The higher the mark-up, the greater is the realized market power. There are a broad range of studies that use the Lerner index like Angelini. and Cetorelli (1999), Padoa-Schioppa (2001), Carbo et al., 2003, Maudos and Perez (2003), Toolsema (2003), Fernandez de Guevara and Maudos (2004), Carbo et al. (2005), Carbo´ et al. (2006); Humphrey et al. (2006), Fernandez de Guevara et al. (2007); Carbo and Rodriguez (2007), Maudos and Fernandez de Guevara (2007), Carbó et al. (2009). A number of studies have used the Lerner index to try to determine the trend in competitive behavior over time.

An alternative non-structural indicator of the degree of market competition is the Panzar and Rosse (1987) H-statistic. The H-statistic measures the extent to which changes in banking costs are reflected in changes in banking revenues. It is calculated as the sum of the ratios of the percentage change in total revenue (from all sources) to the percentage change in the three input prices (funding, labour and capital costs), holding constant total banking output (total assets), leverage, and two balance sheet composition variables (loans to assets and deposits to total liabilities). There are a various studies using H-statistic measures. Some of them examine competition on European countries like those of Shaffer (1993), Molyneux et al. (1994), Bikker and Groeneveld (2000), De Bandt and Davis (2000), Weill (2003), Boutillier et al. (2004), and Koutsomanoli-Fillipaki and Staikouras (2004), Carbó et al. (2009). Claessens and Laeven (2004), Bikker and Haaf (2002) assessed competition using H-statistic for a sample of different countries,

including European ones. There are also individual country studies: for Germany – Hempell (2002), Gischer and Stiele (2008), for Italy – Coccorese (2004), for Greece – Hondroyiannis et al. (1999), Coccorese (2005), for Spain – Maudos and Perez (2003), Carbo et al. (2003), for Finland – Vesala (1995), for Canada – Nathan and Neave (1989), for Japan – Molyneux et al (1996).

3. Methodology and data used

The purpose of this study is to analyze the competitive conditions in the banking sector of Romania, in light of the reforms implemented in this country and the immense changes in Romanian banking system using bank-level data. There are no other studies that measure both structural and non-structural indicators for Romanian banking competition.

In order to examine the level of competition and market power of banks in Romania for period 2003 – 2009, we estimate the non-structural indicators and compare it with the structural indicators of competition. In particular, we measure competition using Lerner index and the H-statistic, indicators what are estimated using bank-level data and are compared with a standard market structure measure of concentration like HHI and CR5.

We estimate the degree of bank market power using bank-level data, the approach followed is similar to that of Maudos and de Guevara (2007) and Delis and Tsionas (2009) who defined the Lerner index as:

$$L_{it} = (p_{it} - mc_{it}) / p_{it} \quad (1)$$

where p is the price of total assets computed as the ratio of total revenue to total assets; mc is the marginal cost of total assets. In particular, we opt for a modeling framework that allows mc to differ across banks and time, using a non-parametric technique to estimate observation-specific marginal costs from a cost function. In particular, here we resort to the estimation of the following Cobb-Douglas cost function:

$$\ln c_{it} = a_0 + a_1 \ln q_{it} + a_2 \ln d_{it} + a_3 \ln w_{it} + \varepsilon_{it} \quad (2)$$

where c is the total cost of bank i at time t , q is bank output (measured by total assets), d is the value of bank deposits, w are the prices of inputs and e is a stochastic disturbance. This cost function assumes that banks use inputs and deposits to produce output q (for a similar implementation, see e.g. Uchida and Tsutsui: 2005; Brissimis et al.: 2008). The marginal cost of bank output is simply a_1 .

In the case of perfect competition, $L=0$; under pure monopoly, $L = 1$; for monopolistic competition L ranges between 0 and 1; and $L < 0$, implies pricing below marginal cost and could result, for example, from a non-optimizing behavior of banks.

In our application of the Panzar–Rosse approach, the following equation is estimated to assess the H statistic from a panel dataset of banks from Romania for period 2003 – 2009:

$$\log\left(\frac{R_{it}}{TA_{it}}\right) = \alpha_0 + \sum_{k=1}^K \alpha_k \log \omega_{it}^k + x_{it} \beta + \varepsilon_{it} \quad (3)$$

where R is the revenue; TA is the total assets; w_k is the unit price of input k ; x is a vector of control variables; ε is the disturbance term; i and t denote bank and time respectively. The H statistic is the sum of α_1 to α_k in this specification.

Panzar and Rosse (1987) showed that the H statistic indicates the nature of market structure under following assumptions: a) banks are profit maximizing; b) banks produce revenue using labour, capital and intermediated funds as inputs; c) higher input prices are not associated with higher quality services that generate higher revenue.

For accurate identification of the H-statistic using an estimated revenue equation based on a static equilibrium model, it is necessary to assume that markets are in long-run equilibrium at each point in time when the data are observed. Accordingly, the equilibrium profit rate should be uncorrelated with the factor input prices. To test of the market equilibrium assumption we estimated in addition following equation:

$$\log(1 + R_{it}) = \alpha_0 + \sum_{k=1}^K \alpha_k \log \omega_{it}^k + \beta x_{it} + \beta_{TA} \log TA_{it} + \varepsilon_{it} \quad (4)$$

with the variable TA controlled as an explanatory variable.

The estimated value of H statistic ranges between $-\infty$ and 1. H statistic is smaller than 0 if the underlying market is monopoly, it ranges between 0 and 1 for monopolistic competition and an H statistic of unity indicates perfect competition.

In order to estimate the non-structural indicators of competition we used the following set of data: a) inputs: personnel expenses, fixed assets and financial capital (sum of total deposits, total money market funding, total other funding and equity); input prices: total personnel expenses over total assets, other operating expenses over fixed assets and interest expenses over financial capital; control microeconomic variables: total capital ratio, equity to total assets ratio, credit risk measured as ratio of loan-loss provisions to total loans (LLR_GL), liquidity risk measured as ratio of liquid assets to total deposits and borrowing funds (LA_TD); and control macroeconomic variables: GDP growth rate – Growth in real GDP in per cent (GDP_G), Inflation rate - change in annual average retail/consumer price level in per cent (IR), Level of financial intermediation – domestic credit provided by banking sector percentage of GDP (FIN_INT).

The empirical model specified in equation is estimated using the panel least square fixed effects methodology. A second set of models is estimated, GMM data models, to allow comparison of results, and as a robustness check. The models are estimated on a panel of 24 commercial banks from Romania for 2003 – 2009 period.

4. The results of the research

The most common structural measures of competition and concentration are the Herfindahl-Hirschman Index (HHI) and the n-bank concentration ratio (CRn). The HHI is defined as the sum of squared market share of the banks in the market. The upper bound of the HHI is 10.000, which indicates a monopoly, and the lower bound is 0 in the situation of an infinite number of banks. A market with a result of less than 1.000 is a competitive marketplace, a result of 1.000 – 1.800 indicates a moderately concentrated marketplace and a result of 1.800 or greater indicates a concentrated marketplace. The n-bank concentration ratio (CRn) is calculated as the percentage of the market controlled by the top n banks in the market, usually the first three or five banks, and the measure takes the share of deposit, loans or assets.

Table 1 Structural indicators of competition in the Romanian banking system for 2003 – 2009 period by year

Year	Herfindahl Index for credit institutions	Share of total assets of the five largest credit institutions	Number of credit institutions	Number of local units (branches)	Number of branches of credit institutions from EU countries
2003	1251	55.2	39	3387	7
2004	1111	59.5	40	3031	6
2005	1115	59.4	40	3533	5
2006	1165	60.1	39	4470	6
2007	1041	56.3	42	6340	10
2008	922	54	43	7375	10
2009	857	52.4	42	6425	10

As we can see in the Table 1, the concentration of the Romanian banking system has been decreasing continuously from 2003 to 2009. This means that the competition in the Romanian

banking system has increased yearly, especially due to diminishing of the state capital and entering of foreign capital.

Table 2 Non - structural indicators of competition in the Romanian banking system for 2003 – 2009

Model	OLS	GMM
<i>Lerner index</i>		
Lerner index	0.908022*** (0.044363)	0.842283*** (0.078149)
<i>H statistic</i>		
Personnel cost	0.357857*** (0.020786)	0.455813*** (0.107588)
Operational cost	0.033020*** (0.011901)	0.038437 (0.074553)
Financial cost	0.313549*** (0.019461)	0.445536*** (0.087971)
H statistic	0.704426	0.939786

Note: Standard deviations are presented between brackets.

*, **, *** indicates significance levels at 10%, 5% and 1%

Table 2 reports the estimates obtained from applying the methodology described above to the Romanian banking sector. Most of the input prices reported in Table 2 are statistically significant at conventional levels, which imply good fit of the revenue equations.

The both results, Lerner index and H statistic, show that Romanian banking system is characterized by monopolistic competition and relatively competitive practices.

The price of fixed assets contributes less to the equation for the H-statistic than the rest of the input prices, result in line with the literature (see Molyneux et al. 1994 and Bikker and Haaf 2002) and it means that excess fixed assets does not generate abnormal revenue.

Finally, we test for long-run equilibrium using ROA as the dependent variable as discussed above. The result (i.e. $H_n=0$) suggests that the hypothesis of equilibrium is confirmed for Romanian banking systems.

5. Conclusion

As the structural indicators show, the concentration of the Romanian banking system has been decreasing continuously from 2003 to 2009. This means that the competition in the Romanian banking system has increased yearly, especially due to diminishing of the state capital and entering of foreign capital. The Romania' accession to European Union had an active effect on these trends. The both results, Lerner index and H statistic, show that Romanian banking system is characterized by monopolistic competition and relatively competitive practices. Personnel cost, operational cost and financial cost are statistically significant at conventional levels, which imply good fit of the revenue equations. The results also demonstrate that excess fixed assets do not generate abnormal revenue. Even if some banks have extended their network aggressively for a bigger share of market, they do not account larger revenues yet. Personnel cost and financial cost higher contributions to the equation for the H-statistic comparative with operational costs could be explained by a intense competition in recruiting and maintaining the personnel (due to head hunting and personnel migration) and a high cost of financial resources, due to high cost with the minimum reserve requirements and the using of parental undertakings financing as a form of profits repatriation.

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VALUE AT RISK - CORPORATE RISK MEASUREMENT

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The notion of "risk" is used in a number of sciences. The Faculty of Law studies the risk depending on its legality. The Accident Theory applies this term to describe the damage and the disasters. One can find studies on the risks in the works of psychology, philosophy, medicine and within each of these areas the study of the risk is based on the given science subject and, of course, on their methods and approaches. Such a variety of risk study is explained by the diversity of this phenomenon.

Under the market economy conditions, the risk is an essential component of any economic agent management policy, of the approach developed by this one, a strategy that depends almost entirely on individual ability and capacity to anticipate his evolution and to exploit his opportunities, assuming a so-called "risk of business failure."

There are several ways to measure the risks in projects, one of the most used methods to measure this being the Value at Risk (VaR).

Value at Risk (VaR) was made famous by JP Morgan in the mid 1990s, by introducing the RiskMetrics approach, and hence, by far, has been sanctioned by several Governing Bodies throughout the world bank. In short, it measures the value of risk capital stocks in a given period at a certain probability of loss. This measurement can be modified for risk applications through, for example, the potential loss values affirmation in a certain amount of time during the economic life of the project- clearly, a project with a lower VaR is better.

It should be noted that it is not always possible or advisable for a company to limit itself to the remote analysis of each risk because the risks and their effects are interdependent and constitute a system. In addition, there are risks which, in combination with other risks, tend to produce effects which they would not have caused by themselves and risks that tend to offset and even cancel each other out.

Keywords: risk, value at risk, confidence intervals, variance, Monte Carlo simulation;

JEL Classification: M21, G30, C58;

1. Introduction

There are several ways to measure the risks in projects. These include:

- *The Probability of Occurrence.* This approach is simplistic, yet effective. As an example, there is a 10 percent probability that a project may even fail (it will restore a negative net present value indicating losses) within the next five years. Moreover, suppose two similar projects have identical implementation costs and expected returns. Based on a single-point evaluation, managing between them would be insignificant. However, if the risk analysis such as Monte Carlo simulation is carried out, the first project might indicate a 70 percent loss probability compared to only a 5 percent probability of loss of on the second project. Clearly, the second project is better when the risks are assessed.

- *Standard Deviation and Variation.* Standard Deviation is a measure of the average deviation of each data point from the mean value. This is the most popular measure of risk, where a higher standard deviation implies a wider distributional width and therefore carries a higher risk. The drawback of this measure is that both upside and downside variations are included in calculating the standard deviation. Some analysts define the risk as the potential losses or downside; thus, the standard deviation and variance will penalize both the upsides and the downsides (disadvantages).

- *Semi-Standard Deviation.* The semi-standard deviation only measures the standard deviation of risks and ignores the upside fluctuations. Modifications of the semi-standard deviation include calculating only the values below the mean or values below a threshold (e.g., negative profits or negative cash flows). This provides a better picture of the risk, but is more difficult to estimate.

- *Volatility.* The concept of volatility (change) is widely used in the applications of real options and can be briefly defined as a measure of uncertainty and risks. Volatility can be estimated using several methods, including simulation of the uncertain variables impacting a given project and estimating the standard deviation of the yields logarithmic asset over time. This concept is more difficult to define and estimate, but is more powerful than most other risk measures in that this single value includes all sources of uncertainty contained in a single value.

- *Beta.* Beta is another common measure of risk in the investment finance arena. Beta can be defined simply as the systematic market risk of a financial asset. This concept is made famous through the CAPM, where a higher beta means higher risk, which in turn requires a higher expected return on the asset.

- *Coefficient of Variation.* The coefficient of variation is simply defined as the ratio of standard deviation to the mean, which means that the risks are common-sized. For example, the distribution of a group of students' heights (measured in meters) can be compared to the distribution of students' weights (measured in kilograms). This measure of risk or dispersion is applied when the variables' estimates, measures, magnitudes, or units differ.

- *Value at Risk.* Value Risk (VaR) was made famous by JP Morgan in the mid-1990s through introducing the RiskMetrics approach, and has thus far been sanctioned by several bank governing bodies around the world. In short, it measures the amount of risk capital stocks in a given period at a particular probability of loss. This measurement can be modified to risk applications by stating, for example, the amount of potential losses a certain percent of the time during the economic life of the project- clearly, a project with a smaller VaR is better.

- *Worst-Case Scenario and Regret.* Another simple measure is the value of the worst-case scenario and catastrophic losses. Another definition is regret. That is, if a decision is made to pursue a particular project, but if the project becomes unprofitable and suffers a loss, the level of regret is simply the difference between the actual losses compared to doing nothing at all.

- *Risk-Adjusted Return on Capital.* Risk-adjusted return on capital (RAROC) is the ratio of the difference between the 50th percentile (median) return and the 5th percentile return on a project's standard deviation. This approach is used mostly by banks to assess profitability at risk by measuring only the potential negative effects and ignoring the positive gains.

In 1994 it appeared within the JP Morgan's the RiskMetrics department, led by Till Guldemann, specialized only on the risk study and analysis. The risk measure chosen by RiskMetrics was the value at risk (VaR). RiskMetrics separated from the the parent company in 1998 and became RiskMetrics Group, specialized on consulting and software. The success of the value at risk was also due to the importance attributed to it within The Group of 30 (G-30) Report (1993) and in the 1996 Amendment of the Basel Agreement, which recommends that central banks use VaR to determine the required minimum capital of commercial banks to cover their market risk to which it is exposed.

As a general definition, VaR is the maximum level of loss generated by a specific portfolio structure estimated at a certain degree of trust over a reference period. The main elements of this methodology focus on:

- the period of analysis - it is associated with holding the portfolio horizon or time required to sell it. The typical VaR application periods are from one day to one year (e.g., a 10-day period of analysis is required to compute the capital adequacy of financial intermediaries in accordance with The Basel II Capital Accord, while a period of one year may be used to estimate the credit risk);
- confidence interval – is the interval in which the VaR is expected not to exceed the maximum level of loss. Usually, the intervals used are 99% and 95% respectively.
- expressing VaR level – it is usually measured in monetary units.

2. The methodology for calculating value at risk

Value at risk meets quite several criteria. In relation to the ADEH axioms it satisfies the monotonicity axiom, positive homogeneity and the translation invariance. In addition, it also has the additivity property.

As main disadvantage, VaR does not present the sub-additivity property and thus, there is not a coherent risk measure in the general case. However, for special classes of distribution VaR is consistent, for example, for the normal distributions class.

Let z be the reference level with which the portfolio value is compared to at the end of time horizon considered. If $x < z$, then there is a loss of $z - x$. So, the portfolio loss is given by the random variable:

$$\tilde{l} = z - \tilde{x} \quad (1)$$

As reference levels can be used the x_0 baseline and $E(\tilde{x})$ the expected value. The probability of a loss less than or equal to l is given by the distribution function:

$$F_{\tilde{l}}(l) = P(\tilde{l} \leq l) = \int_{-\infty}^l f_{\tilde{l}}(t) dt \quad (2)$$

Using the loss distribution $F_{\tilde{l}}$ for a given time horizon and a particular confidence level $1 - \alpha$, we get the equation:

$$F_{\tilde{l}}(\text{VaR}) = P(\tilde{l} \leq \text{VaR}) = 1 - \alpha \quad (3)$$

Applying the inverse function $F_{\tilde{l}}^{-1}$ to the above equation we get a value at risk:

$$\text{VaR} = F_{\tilde{l}}^{-1}(1 - \alpha) \quad (4)$$

Interpreting the value at risk as the capital required to face the risk, figure(4) implies that in $100(1 - \alpha)\%$ cases, this capital will not be exhausted. Applying the concept of value at risk to $L - E(L)$ instead of L , we obtain a risk measure of the first type.

Another option for this risk measure is the conditional value at risk at confidence level α defined as:

$$\text{CVAR}_{\alpha}(L) = E[L \mid L > \text{VaR}_{\alpha}] \quad (5)$$

On the interpretation of VaR as 100 (1- α)% from the maximum loss, CVaR can be interpreted as the average maximum loss in 100% α of cases. Conditional Value at Risk defined in figure (7) is a coherent risk measure if there is a density function, but not in general. In the general case, be considered alternative measures of risk such as the expected discovery or other equivalents, when consistency is required.

Conditional value at risk allows the decomposition:

$$\text{CVAR}_\alpha(L) = \text{VAR}_\alpha(L) + E[L - \text{VaR}_\alpha \mid L > \text{VaR}_\alpha] \quad (6)$$

meaning the conditional value at risk is the sum of value at risk and the average excess value at risk if such an excess exists. So, the conditional value at risk will be at least as high as the value at risk.

3. Models for estimating the value at risk

There are a variety of methods that allow estimating VaR. Within these we can distinguish:

1. Delta-normal method (variance - covariance) implies that the variations occurring in the risk factors are always normally distributed and that variations in the portfolio value are linearly dependent on the variations of all risk factors.
2. Historical Simulation Method assumes that all the future variations will have the same distribution that they had during the previous periods;
3. Monte Carlo Simulation Method in which the variations are simulated in a (pseudo) random way.

1. The Variance-Covariance method was popularized by JP Morgan Chase in the early '90s in their own RiskMetric methodology. A simplified version of it can be built on the assumption that the only risk factor for the portfolio is induced by the variations occurring in the value of its component assets. In this situation there are the following assumptions:

The portfolio is composed of linear delta values, meaning the modifications in portfolio values (and within its returns) are linearly dependent on all the individual modifications in the assets values included in its structure;

a. The variations occurred in the portfolio assets value are normally distributed.

Based on the two assumptions, we can state that the portfolio return is normally distributed because a linear combination of normally distributed variables has itself a normal distribution.

One can make the following notations:

i - the yield on individual asset "i", an yield based exclusively on its value variation ;

ρ - the yield on the portfolio (its value variation);

N - the number of the assets in the portfolio;

μ - the expected value (average);

σ - the standard deviation;

V - the initial value (in monetary units);

$\omega_i - \frac{V_i}{V_p}$ - initial allocation of capital asset "i";

$\bar{\omega}$ - the vector of all variables ω_i ; ω^T , it is the transpose of the vector;

Σ - covariance matrix between the returns of N assets ($N \times N$ matrix);

All the assets are held throughout the period of analysis.

$$\mu_p = \sum_{i=1}^N \omega_i \mu_i \quad (7)$$

$$\sigma_p = \sqrt{\omega^T \Sigma \omega} \quad (8)$$

The main advantage of this method lies in its "compact" nature that facilitates the empirical implementation and the main disadvantage is the less plausible character of the assumption regarding the normality of the individual values modifications and of the portfolio overall value. The Historical Simulation Method is the simplest and the most transparent method of calculation. This method involves simulating a current structure portfolio based on historical data with emphasis on the distribution in its yield and the computing of a percentile. Its main advantage is that it does not require the recourse to the normal distribution assumption and the disadvantage in its empirical application being the high computational and informational requirements.

1. Conceptually, Monte Carlo Method is relatively simple, but involves a higher simulation effort than the previous methods. This method involves:

- determining the total number of iterations of the simulation N;
- for each iteration:
 - the generation of a (pseudo) random script regarding the price developments;
 - reassessing the portfolio on the basis of this scenario;
 - computing the global profit / loss per portfolio as a difference between the market current value and the calculated value in the previous stage;
- the estimation of the simulated profit / loss distribution;
- VaR for a confidence interval is calculated as a percentile.

The method is useful for estimating the VaR in case of financial asset portfolios incorporating non-linear returns.

4. Conclusions

Value at risk is one of the most modern techniques used in measuring the risks. VaR was originally used for measuring the market risks. However, the literature emphasizes that the VAR is now increasingly used for measuring other risk categories. This is due to explicit recognition of the need for an integrated risk management. In this case, the risks management focused on the financial risks will cause the financial risks to "slide" in those areas where they are not measured (Jorion, P., 2000:467).

However, extending the use of VaR has its challenges. A major difficulty is given through data availability. VaR was first used to measure the market risk of some financial institutions. In this case, VAR is simple to calculate, with high frequency data, in many cases even daily. For other categories of risks (e.g. business) or for companies working in other sectors, data availability is a problem. In most cases there are low frequency data. Using the annual frequency data would result in a VaR that for a 99% confidence interval means the maximum expected loss in one year of a hundred years. The interpretation of this result is of little relevance given the period considered plus it would take 100 years many times to validate the results, which is impossible in practice (Stulz, R., 1996:21). The second limit of VaR consists in the assumption of a normal distribution of potential gains and losses. The literature emphasizes that in reality the losses tend to be higher than those suggested by a normal distribution. Therefore, using VaR tends to underestimate the risks a company faces. Another limit concerns defining the VaR risks. VaR identifies the maximum loss that can occur with a certain probability. But a company is more interested in the cumulative loss that can occur within one year because just the cumulation of the losses for a year may result in a difficult financial situation.

The literature suggests an alternative to VaR using Monte Carlo simulation for forecasting the cash flows over a period taking into account the risks the company faces. The probability of a negative financial situation would be measured by the proportion of distributions for which the cash flow is below a set threshold. Such a technique can also be used to estimate the impact of different hedging strategies have on the probability of a negative financial situations. In addition,

such a technique would address non - normal data and other issues specific to chronological series (mainly autocorrelations), although the latter can be solved by other specific techniques.

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MEASURING THE RISK OF BANKRUPTCY IN THE COMMERCIAL SECTOR IN ROMANIA

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In this paper, the author presents ways to evaluate the rating of commercial entities based on logit model. On this basis were determined the ranges of financial security and was set the probability of failure of these firms in Romania.

Keywords: rating, financial ratios, rating models

JEL Classification: G32

1. Introduction

Managerial or financial analysis methods of risk allow measuring past performance of the company, informing at a small extent on its future. Financial results can degrade very quickly over time. The need for more specific information about the future, about the risk of failure becomes increasingly obvious.

As a response to these practical requirements, the risk of failure diagnosis has undergone a significant development due to the use of statistical methods for analyzing the financial situation from a set of rates.

2. Knowledge Level

“Credit scoring” method aims to provide predictive models for assessing risk of failure of an enterprise. This method is based on statistical techniques of discriminant analysis of information provided by the transformation of economic and financial indicators in a score able to predict success or failure of a business.

All forecasts and predictions are based on published financial statements. Applying “credit scoring” method involves observing a set of enterprises consisting of two distinct groups: a group of enterprises with financial difficulties and a group of healthy firms. For each of the two groups is established a set of rates (5-8 financial ratios), the most relevant in terms of predictability of failure, then it’s determined the best linear combination of rates to distinguish the two groups of firms. In the failure prediction models are met the most important financial ratios such as return on assets, asset turnover rate, leverage, liquidity, interest coverage, etc.

Following the application of discriminant analysis, for each company is obtained a “Z” score, linear function of a set of rates. The obtained scoring function allows the issuance of a value judgment which estimates the likelihood of risk occurrence in the analyzed firms, allowing distinguishing the healthy firms from the ones in difficulty.

“Z” score assigned to each company is determined by the function:

$$Z = a x_1 + a x_2 + \dots + a x_n$$

(1)

where:

Z – score function;

x – represents the rates involved in the analysis;

a – is the weighting coefficient of each rate.

In an extensive research study, William H. Beaver used financial indices that are used to avoid failure. The study contains a sample of 79 relatively well-capitalized firms that went failed. For each of these firms another company which didn't go failed was selected, but which was part of that economic segment, and had approximately the same size as those that failed, in the same time period. These samples were used to test the capacity of 30 financial ratios. Average values of the indices for the two samples (failed firms and non-failed firms) were compared over a period of five years before the failure took place. An example of such a comparison, using cash flow/total debt indices is shown in the following figure (Fig. no.1). It may be noted that the average index of firms that failed differs significantly from that of firms that didn't fail.

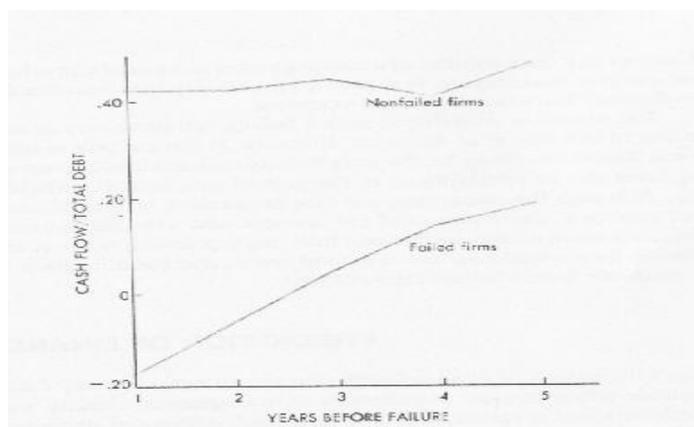


Figure no.1. Comparison between failed firms and non-failed ones

In addition to comparing average values, Beaver tested the samples, using multiple discriminant method and continued his investigations analyzing the samples using probability indices. Not all examined financial ratios predicted failure as good as others; many rates have shown a great power of prediction. In an article about comparison, Beaver investigated the ability to predict the failure in changes in stock market share prices of these companies. He established that the median price of the market shares of failed firms dropped more and more as it was closer to failure, compared to prices of the companies which didn't fail. The largest price decrease for bankrupt firms' shares took place in the final year of research. Beaver concludes that investors adjust the share price to the deterioration condition of the financial situation of companies that fail. Moreover, he identified the causes to be consistent with investors, to assess the probability of failure on the basis of financial indices.

In a similar study, Edward I. Altman went through multiple comparative analyses to prevent failure, using various financial ratios. Altman worked with a sample of 33 corporations that went bankrupt during the period 1946-1965. Like Beaver, he gathered a couple of samples of 33 companies that didn't fail, randomly chosen. He started with 22 financial indicators, selected five of them who have made a good distinction between failed firms and non-failed ones using information dating 5 years back before failure. Unsurprisingly, the prediction accuracy of the model of multiple differences decreased with the number of years before bankruptcy. However, the model could foresee failure quite quickly, up to two years before bankruptcy occurred. Altman also tested the model with a second standard of samples of non-bankrupt or bankrupt companies. Using estimative parameters derived from the original sample, he found that the model presents accurate predictions when it is used in conjunction with the second standard of samples. In Altman's investigation, like Beaver, it was established that the bankrupt firms' financial indicators have deteriorated near bankruptcy, the largest damage occurred between the

third and second year. Altman concludes that because of analysis of differences, a creditor may successfully predict a potential bankruptcy.

In a similar study with those of Altman's and Beaver's, Edward B. Deakin used two types of samples of 32 failed and non-failed companies during the years 1964-1970. Using multiple discriminant analysis based on 14 indicators, he found that bankruptcy can be predicted with great precision accuracy even three years before bankruptcy occurs. In essence, Deakin confirmed the hypothesis formulated in Beaver's method and found that multiple discriminant analysis has generated more accurate results.

Worldwide, more models of prediction of success / failure of business are therefore known and we will address the following, namely: Altman Model (1968 and 1983); Springate Model (1978); Conan&Holder Model; Chartered Accountants Model (CA Score – 1987); Fulmer Model (1984); Yves Collongues (1) and Yves Collongues (2) Models etc. All these models were built based on the analysis of a given sample of bankrupt companies and profitable for an extended period of time in which the authors of the models have studied the evolution of their results. Characteristic of all models is that they are meant to predict bankruptcy for a particular type of business in terms of size and profile of activity.

Score function values are compared with certain threshold levels, the uncertainty area being located within the two limits. The higher the score function values are, the more competitive the company is, with a good financial position and a low probability of bankruptcy. Thus, in the Altman model Z score is interpreted as follows: $Z \leq 1.8$ – bankruptcy is imminent; $Z > 3$ – good financial standing; $1.8 < Z \leq 3$ difficult financial situations, with relatively high risk of bankruptcy.

Financial models for predicting bankruptcy apply especially to large companies. Economic practice shows, however, that economic failure is a much more acute problem for small firms, where the rate of failure is very high, around 10% per year, according to studies conducted by British researchers. The need to build bankruptcy prediction models for small and medium category became imperative, but lack of financial and accounting information and their reliability has made this a difficult process. Thus, specialists in the field have developed non-financial models for predicting the bankruptcy of small firms: Cooper Model (1991); Reynolds and Miller Model (1989); Lussier Study etc.

These models are based predominantly on non-financial variables, such as managerial experience and competence, the employed personnel's qualification, business relations, marketing, product quality etc. Certain importance coefficients on which the total score function was calculated were assigned to these non-financial factors. Discriminant analysis is used not only to determine the probability of bankruptcy of companies in difficulty, but also for predicting purchases of companies. This new applicability of the discriminant technique arises on the capital market in order to establish key financial characteristics of companies targeted for acquisition or merger. Among the most popular models for the prediction of mergers and acquisitions we mention: Belkaoni Model (1978); Rege Model (1984); Wanslez and Lane Model (1983); Clayton and Fields Model (1991) etc.

Although worldwide, scoring method application had a success rate of around 75-90%, bankruptcy prediction using these models constructed by various foreign authors is difficult to accomplish in developing countries with fragile economies, such as Romania. On the other hand, building specific models to the Romanian companies is also hampered by economic instability and non application of the bankruptcy law, hence the impossibility of clear separation of the profitable and insolvent companies. However, Romanian economists work is in commendable in establishing such models as: Măneacă and Nicolae Model (1996)-model proposed for metallurgy industry; B-Băileşteanu Model (1998); Ivoniciu Model (1998); Anghel Model (2001) etc.

As a conclusion, the scoring method is only a tool to detect early the bankruptcy risk or acquisition prediction, and the information value of the score should not be overestimated. Discriminant analysis actually reduces the basic information by selecting the most significant financial ratios considered constant over time, while the firm is an economic and social system that operates in a complex environment with multiple variables to determine its health or weakness. Because of caution it is recommended to pay attention to the development of the score of the same economic sector companies, as well as to complete the diagnosis with traditional methods of analysis.

3. Methodology and Results

Bankruptcy prediction models are generally known as means of assessing the financial “risks” of the companies. In financial theory three types of evaluation of this financial issue are discussed, namely: *univariate* analysis, *multivariate* analysis and *logit* analysis. Univariate analysis assumes that a single variable can be used in the prediction of a certain objective (Cook and Nelson 1998). Univariate analysis identifies factors related to the dangers to which a company is subject undertaking. However the models in this category are assessment procedures of relevant risk (Stickney 1996: 507). Multiple discriminant analysis (MDA) is an attempt to assess the potential conflict between financial ratios using simple variables. The most common used model was proposed by Edward Altman, Professor of Finance at the Stern School of Business at New York. Starting from Altman Model, Cristine Zavgren (Zavgren 1985: 19-46) brought improvements to company’s bankruptcy prediction, model that was further developed by Andrew William Lo (Lo, 1986) and Claude Paul Stickney (Stickney, 1996: 510), which is the third way of predicting bankruptcy called the logit model.

In the 1980s and 1990s, the trend was to use the logit models against multiple discriminant analysis. More recently, logit analysis was considered to be more an advanced analytical tool like neural network, being found in recent works of Professors Eduard Altman, Giancarlo Marco and Franco Varetto (Marco and Varetto 1994: 505-530).

Applying this model implies the following four steps:

- seven financial indicators are calculated according to Table no.1:

Table no. 1 Logit Table

Financial Ratios	COEFFICIENTS
	+ 0.23883
Inventory/Turnover	- 0.108
Receivables/Inventory	- 1.583
(Cash + Short-term Investments)/Total Assets	- 10.78
Current Assets/Current Liabilities	+ 3.074
Operating Profit/(Total Assets – Current Liabilities)	+ 0.486
Long-term Liabilities/(Total Assets – Current Liabilities)	- 4.35
Turnover/(Working Capital + Fixed Assets)	+ 0.11
Y =	$\sum (\text{Coefficient} * \text{Financial Ratio})$
Bankruptcy probability =	$1/(1 + e^y)$

Source: Stickney Model

- in the second stage, each rate is multiplied by a coefficient which may take positive or negative values;

- in the third stage, partial products are summed;

- finally, the probability of bankruptcy is calculated as the inverse function $(1 + e^y)$.

For the case study we randomly selected 50 Romanian trading companies. The analyzed data is presented in Table no.2.

Table no.2 Evolution of trade balance sheet aggregates

TOTAL Trade	2005	2006	2007	2008	2009
Turnover	175997997	277549677	400274178	269003979	309051020
Stocks	19071750	28547147	66185618	41225041	46754281
Receivables	19356824	28183611	44238594	43874254	58349549
Short-term investments	487554	154140	266289	812893	100
Cash = Cash and bank accounts	5348370	7109355	7772319	3739599	11901476
Total Assets	62178093	89223753	172250511	135484199	175137098
Current Assets= current assets + expenses in advance	46908761	67818142	124124061	95029150	122854279
Current Liabilities=liabilities < a year + deferred income	39848424	54482802	93061933	82825709	93434052
Operating profit	4049446	3740511	8214764	11649816	17392474
Long-term liabilities	13644660	19382101	33387782	19954786	39078705
Working capital	6270746	11744334	28858798	9713743	26004616
Fixed assets	16058923	22996617	50329780	42944747	55698430

Source: Author's calculation

	Financial Ratios				
	2005	2006	2007	2008	2009
Stocks/Turnover	0.108363	0,102854	0,165351	0,153251	0,151283
Receivables/Stocks	1.014947	0,987265	0,668402	1,064262	1,248004
(Cash + Short-term investments)/Total Assets	0.093858	0,081408	0,046668	0,033602	0,067956
Current assets/Current liabilities	1.17718	1,244762	1,333779	1,147339	1,314877
Operating profit/(Total Assets-Current Liabilities)	0.181348	0,107669	0,103737	0,221233	0,212874
Long-term Liabilities/(Total Assets-Current Liabilities)	0.611055	0,557904	0,421624	0,378947	0,478302
Turnover/(Working capital + Fixed Assets)	7.881801	7,989121	5,054696	5,108464	3,782613
y=	-0.71446	-0,12087	1,293386	0,484446	-0,24363
Bankruptcy probability=	0.671386	0,530182	0,21528	0,381203	0,560608

It may be noted that according to the Stickney Model the trade sector in terms of the 50 analyzed companies in the industry records a failure probability of over 60% in the first year. Probability decreases in the second year, third year records the best results, the probability of bankruptcy being much lower (21%) compared to the first year.

4. Conclusions

Business risk assessment methods are varied and complex. Currently, there are no significant differences between the methods and used risk assessment tools. The issue of risk and its approach, causes that generate it and effects it determines, are one of the most important issues in order to improve economic agents' activity for achieving high profitability. Risk is part of the daily work and its approach, the preference for risk or risk aversion is a subjective issue, which pertains to perception, analyzing decision factors, quality of management. Deficiencies in the quality of management will inevitably lead to the emergence of risk factors that cause damage to the business, bankruptcy symptoms, and finally business bankruptcy.

Expectations for future developments in the economic environment and the environment in which businesses operate are an essential coordinate in economic-financial analysis. Market players base their decisions on future expectations, which in turn are determined by the decisions they take today, decisions that may induce or not the subsequent emergence of risk factors.

Analysis of profitability of a company (profitability is in fact the purpose of carrying out business transactions) is incomplete if it does not take into account the risk, which may or may not appear until it has reached that return. Any activity involves in its conduct economic risks that economic agents are willing or not to undertake, to the extent that these risks are offset by a corresponding economic return. The risk is related to the parties who are involved in the business, the nature of business or when it comes to investment to the nature of the subject of investment, the resources involved in the conduct of business or investment, the motivations that exist for all those involved in carrying out the activity and its scope.

If the risk structure is known, the causes that have generated it and the effects, the difficulties it poses, they can be controlled, reduced or even eliminated in the process of economic activity. In an economy where competition governs economic life, one of the ways to reduce an investor's risk is to diversify the business portfolio. But business environment is seriously affected by events occurring in the political arena and therefore political instability is itself a generator factor of risk.

It can be concluded that the risk is one of the broadest concepts, difficult to define by investors and whose analysis is imperative for the purpose to ensure the investment process: ensuring a return and making a profit. Each investor is required to quantify the risk entailed in his commitment to a business once he assesses the resources because risk is equivalent to business vulnerability and can occur in all activity sectors.

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TROUBLESHOOTING BASEL II: THE ISSUE OF PROCYCLICALITY

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A widespread concern about Basel II capital requirements is that it might amplify business cycle fluctuations, forcing banks to restrict their lending when the economy goes into recession. Under the IRB approach of Basel II, capital requirements are increasing functions of the probability of default (PD), loss given default (LGD) and exposure at default (EAD) parameters estimated for each borrower, and these inputs are likely to rise in economic downturns. In this paper, we compare two alternative procedures that are designed to somehow moderate the procyclical effects induced by Basel II - type capital regulation. The starting points of our analysis consist Jokivuolla, Kiema and Vesala (2009) and Repullo and Suarez (2009), who both examined the impact of regulatory capital's procyclical effects. It's vital to note remarks of Caprio (2009), that is, making regulatory capital levels countercyclical could worsen the state of an economy during a recession. As we do not have access to the Romanian Central Credit Register database, we compute a model-economy that stands as a proxy for the Romanian firms' sector. Our simulated Romanian economy can be characterised by all Romania-specific macroeconomic controls. Then we estimate a model of PDs during the period 2000 – 2010, and based on the estimated probabilities of default we compute the corresponding series of Basel II capital requirements. After the diagnosis of procyclicality, we analyze two procedures that try to mitigate the cyclical effects of capital regulation: smoothing the output of the Basel II formula, and smoothing the input, by construction of through-the-cycle (TTC) PDs. The comparison of the different procedures is based on the criterion of minimizing the root mean square deviations of each adjusted series. Our results show that the best ways to moderate procyclicality are either to smooth the input of the Basel II formula by using through-the-cycle PDs, or to smooth the output with a multiplier based on GDP growth. We conclude that the GDP-based smoothing may be more efficient than the use of TTC PDs in terms of simplicity and transparency. In terms of the GDP adjustment, regulatory capital levels should increase with approx. 1,31% during an economic growth period and decrease with 4,03% during a recession, in order to mitigate the cyclical effects induced by Basel II – type capital regulation.

Keywords: Basel II, procyclicality, regulatory capital, probability of default, credit-crunch.

JEL classification: G18, G17.

I. Introduction

The financial crisis proved that the capital requirements system, which is based on risk weights defined by Basel II, can't adapt to the new economic prosperity. The recession is aggravated by the fact that the banks were forced to squeeze their credits and this caused a delay in the economy's availability to grow. Several financial analysts pointed out the errors in the system,

therefore the Basel Committee on Banking Supervision must find a solution in order to develop the model.

In our paper we compute an in-depth analysis on the issue of the procyclicality, comparing two possible methods that can be used to mitigate the cyclical effects of Basel II regulatory capital. The procyclical effect can be observed in historical data from the banking sector, since the capital regulation based on risk weights is very prosperity-sensitive: in recession the credit losses consume the bank's capital, while venture capital increases. If banks aren't able to gain enough capital for credit losses in a short period of time, then credit-crunch may occur. This kind of process characterizes perfectly the financial crisis. This leads to the fact that banks can't even provide loans for customers with high ratings because of the inadequate level of capital.

The structure of our paper is the following: in the first part we compute a brief review of the literature regarding the issue of procyclicality. This will be followed by an analysis regarding the methods of reducing the procyclical effects, by the use of a logistic model containing a one-month-ahead probability of default (PD). Our goal is to find an answer to the fact that the cyclical effects can be effectively mitigated by fine-tuning of the PD indicators or by the change of the capital requirements. In the conclusion, we seek for other problems that arise when allocating regulatory capital.

II. Literature Review

We analyzed a series of different papers about procyclicality and its issues. Firstly we noticed that Jokivuolla, Kiema and Vesala (2009) and Repullo and Suarez (2009) both examined the impact of the regulatory capital's procyclical effects. Contrary to Repullo and Suarez, Jokivuolla, Kiema and Vesala created a comparison between the regulatory capital requirements of the Basel I and Basel II. Their main question was that whether the risk-based or the constant weights-based regulatory capital requirement shows less procyclical impacts on the credit market. They used a simplified model, which interprets 3 types of market participants: low-risk profile investors, high-risk profile investors and risk-free investors. Their conclusion was that the optimal risk-based capital is the least procyclical. They added that the present Basel II's necessary direction for further development is the implementation of a higher venture capital. Repullo and Suarez used a dynamic equilibrium model in which the banks can't access stock markets in any period. Their conclusion was that, in the case of Basel II Capital Requirements, capital reserves constituted by banks are higher during an economic boom than during recessions.

Secondly, we observed that Pederzoli, Toricelli and Tsomocos (2009) analyzed the problem of procyclicality with comparing two rating systems. They built up a general equilibrium model which contains 2 heterogeneous banks, 2 companies and 1 household. They found that the cyclical rating system results higher default rates and lower profit in the case of banks in recession times.

Kashyap and Stein (2004) argue that if the shadow value of bank capital is low in expansions and high in recessions, optimal capital charges for each type of risk should depend on the state of the business cycle. Without such adjustments, capital requirements would be too low in expansions, when bank capital is relatively plentiful and has a low shadow value, and too high in recessions, when the shadow value of bank capital goes up, leading to the amplification of business cycle fluctuations. Greenspan (2002) noted that "the supervisory leg of Basel II is being structured to supplement market pressures in urging banks to build capital considerably over minimum levels in expansions as a buffer that can be drawn down in adversity and still maintain adequate capital."

Lastly, Caprio (2009) studied the counter-cyclical capital requirements definition and Repullo, Saurina and Trucharte (2010) analyzed and compared the procedures which mitigate the effects of the procyclical capital. The foundation of Caprio's research was a macroeconomic data

analysis from Spain and Columbia. His conclusion was that the risk-based capital regulatory system's rectification results only short term adjustments. On the other side, Repullo, Saurina and Trucharte used data from Spanish companies and estimated a PD model. His results from this research were very complex. Adjusting the output side of the Basel II formula with a credit growth multiplier or a yield multiplier, we don't receive the optimal level of capital from the procyclical point of view. They found two possible solutions for handling the procyclicality: the first one is the input side smooth tuning, and the second one is on the output side, which can be received with the help of a multiplier based on GDP growth.

III. Cyclical adjustments of Basel II capital requirements

The recent financial crisis, with its boom and bust lending cycle, has brought to the forefront the need to address the potential procyclical effects of risk-sensitive bank capital regulation. To see how Basel II capital requirements evolve over the business cycle, we construct a model economy that is composed of one commercial bank and ten firms. The model is practically a simulation of the Romanian economy (also its banking and financial sector) over the period 2000-2010. The firms' sector is composed of 2 corporate, 4 medium and 4 small companies, whose total exposures equal the aggregate credit portfolio to companies in the respective period. Our model economy is explicitly characterised by Romanian macroeconomic data regarding the specified period.

To compute how regulatory capital levels would evolve over the business cycle, we estimate a logistic model of the one month ahead PDs of Romanian firms. The dependent variable, $DEFAULT_t$, is a binary variable that takes value 1 when a firm defaults in the course of a year on its outstanding loans at the end of the previous year, and zero otherwise. The explanatory variables comprise characteristics of the firm, characteristics of its loans, and macroeconomic variables. A borrower is considered to have defaulted if it is 90 days overdue failing to meet his financial obligations on a certain loan or if, with high probability, it is considered to be unable to meet its obligations.

The explanatory variables used in the model (dated in month t) are firm-specific variables and Romanian macroeconomic controls. COL_t represents the proportion of guarantees in a firm's borrowing, proxying the amount of collateral. Jiménez, Salas and Saurina (2006) show that banks ask for collateral to those firms that they denote as being riskier. AGE_t captures the age of each firm, with the idea that younger firms are more prone to default than older ones. $FSIZE_t$ proxies the size of a firm, it is calculated via deflating the EAD_t growth of a firm by the consumer price index; $FSIZE_t$ enters the model in logarithmic terms. $HISTDEF_t$ is considered to be the main risk profile variable that captures whether a certain borrower defaulted in the past. In each observed default event, the variable value is increased by 1. Similar to $HISTDEF_t$, we use $HISTDEL_t$, that stands for the borrowers' record of overdue loans (1). $UTIL_t$ is the ratio between the amount of credit drawn by a borrower and the credit line.

The macroeconomic explanatory variables are GDP_t , that is the rate growth of the gross domestic product, $CREDIT_t$, the rate growth of non-financial (commercial and industrial) loans over the one month period, BET_t , the monthly average return of the Romanian stock market, and $MATURITY_t$, that is the ratio between long-term exposures (2) and the total exposures in the economy. Our database contains a total number of 126 monthly observations, over the last 10 years.

Table 1 in the Appendix presents the results of the estimation of the model (all coefficients are statistically significant at the 10% level). It's interesting to note that some variables' impacts on the default condition (especially macroeconomic variables) are significant after up to 3 or 4 lags. The results show that firms that post collateral when granted a loan have higher probabilities of default. Also, firms whose exposures show a bigger growth rate than the average, have bigger

probability of default. Yet vital to notice that the coefficients of GDP and *MATURITY_4* are negative, meaning that as the growth rate of real GDP and proportion of long term exposures increase in the model economy, the PD decreases. The coefficient of variable *UTIL_3* shows that the higher the utilization of credit lines the higher the PD, so liquidity constraints also seem to play a role in a firm's default. Summing up the analysis of the logit model, we can say that firm's defaults increase during downturns and decrease during and economic upward trend.

PIT capital requirements

Based on the results in Table 1, we compute the point in time (PIT) capital requirements, k_{it} , for each borrower and month using the formula

$$k = PD * LGD * EAD * M,$$

the estimated probability of default, PD_t , and assuming a loss given default (LGD) of 45%, as in the foundation IRB approach of Basel II. The PIT capital requirements per unit of loans for each month is calculated via

$$k_t = \frac{\sum_i k_{it}}{\sum_i l_{it}},$$

where l_{it} denotes the value of the loans to firm i at the end of the month t .

Figure 1 shows how PIT capital requirements evolve among the GDP in the observed period. The cyclical effects can be easily captured by applying the Hodrick-Prescott(HP) trend to the series, with a lambda value of 500. Regarding the HP-smoothed PIT capital series, a significant cyclical variation can be observed, with a gap of 5.82% between the peak and the worst point of the business cycle.

TTC capital requirements – Adjusting the input of Basel II formula

A possible solution for mitigating the cyclical effects of regulatory capital is the use of through the cycle (TTC) capital requirements. To estimate DEFAULT by the TTC approach, we follow the idea of Saurina and Trucharte (2007), that is, replacing the current values of macroeconomic variables by their average values over the sample period. We then compute the monthly capital requirements with the Basel II foundation IRB approach. The results of the re-estimation of the logit model are found in Table 2. Comparing TTC capital requirements with the PIT values, the cyclical variability declines significantly, as it can be observed in Figure 2. The peak-low deviation in the TTC series is of 3.03%, significantly better then in the PIT capital requirements.

The business cycle multiplier - Adjusting the output of the Basel II formula

The second approach for adjusting the Basel II capital requirements is to smooth the output of the formula. Basically, we adjust the PIT-capital requirements series obtained from Table 1 with a business cycle multiplier, as it can be seen in the following formula:

$$k_{adj_t} = \mu_t * k_t.$$

The multiplier can be of various forms, but we use a simple and conventional approach:

$$\mu_t = 2N\left(\alpha * \frac{g_t - g_{avg}}{h_g}\right).$$

In the equation k_t denotes the original PIT capital series, and k_{adj_t} the adjusted series. Regarding the multiplier equation, g_t is the growth rate of one of the macroeconomic variables, g_{avg} its average over the sample period, h_g its standard deviation over the sample period. $N(x)$ is the standard normal cumulative distribution function and α is a positive constant parameter. The key features of the business cycle multiplier are: it is continuous and increasing in the proxy for the business cycle g_t , so capital requirements are increased in favourable periods and lowered during downturns or recessions. Also, μ is bounded, so capital requirements do not increase without bound or become negative. Parameter α is defined as 0.1, however, we tested various other values. The purpose of α is to minimize the root mean square deviation (RMSD) of the adjusted

series, and also to obtain a reasonable amount of capital adjustment. Summing up, we choose the value of α that is best in terms of smoothing the cyclical component of the pit capital requirements series. Figure 3 shows the μ -adjusted capital series (when $g=GDP$), together with the PIT series. Note that the adjusted series has been applied a HP-filter of $\lambda=500$, so that the cyclical-smoothing can be easily observed.

IV. Results

Taking into account the HP-filter fitted values, we compare the different smoothing procedures by computing the RMSD of each adjusted capital requirements series. The values obtained are shown in Table 3. The output-formula adjusted values show a much smaller deviation, as the TTC-series stands out with a RMSD of 0.16%. Regarding the output-smoothing procedure, a choice has to be made in order to specify the best smoothing macro-component. As the GDP and CREDIT deviations are more or less the same, we consider the amount of adjustment made during economic booms and downturns for the respective series. Results are shown in Table 4.

In terms of the GDP adjustment, regulatory capital levels should increase with approx. 1.31% during an economic growth period and decrease with 4.03% during a recession. Having a look at the CREDIT-adjustment, results say that capital levels should increase with 0.86% in case of an upward trend and decrease with 0.88% in case of a downturn in the economy. As the CREDIT variable adjustment makes no significant (reasonable) changes regarding Basel II regulatory capital, we consider the output adjustment based on GDP growth to be the best smoothing procedure. As mentioned earlier, Figure 3 shows the GDP smoothed series together with the real GDP. Note that this result is not due to the fact that GDP growth is one of the explanatory variables in our logit model.

V. Conclusions

In this paper we focused on finding the optimal method for mitigating the procyclical effects of Basel II capital regulation. We analysed two major approaches regarding the issue, which is estimating TTC PDs, and fine-tuning the output of the Basel II formula. By building up a model-economy that simulates the Romanian banking and finance sector, we observed that a GDP growth based smoothing of Basel II capital requirements would be a good solution regarding the procyclicality issue. However, we emphasize that the TTC-approach should not be “written off”, as it is clearly a simple and effective way to make a quick and basic-level fine-tunement to regulatory capital levels. We stick to our statement knowing that the use of TTC PDs has been criticized by Gordy and Howells (2006), who underline the fact that changes in a bank’s capital requirements over time would be only weakly correlated with changes in its economic capital, and there would be no means to infer economic capital from regulatory capital. Our results are similar to those of Repullo, Saurina and Trucharte (2010) agreeing that GDP growth based output adjustment of the Basel II formula is the “way to go” in terms of simplicity, transparency, low cost of implementation and even consistency with the idea of a single aggregate risk factor that underlies the capital requirements of Basel II.

Two major issues are still the purpose of our further research regarding Basel II. The first one, regulatory arbitrage, is mostly threatening safe and sound banking in the European Union, where its hazard is higher than in the countries outside the EU. To reduce this hazard, the specialists started to create a supervisory convergence. From this step, they expect that the discretionary assets will become reduced. The European Commission started a public consultation in 2010, in association with the fact that the 2009th Decree concerning the CRAs does not handle a lot of problems regarding the credit rating agencies. In this consultation document they discuss in detail the possible payment models and new measures, which prevent the potential risk of a rating arbitrage. The supervision of the rating agencies will be done by the European Securities and

Markets Authority. The second, regarding the correct estimation of PD-LGD correlation, is a vital in building up a safe and sound banking system. The model standing behind the Basel II formula is the standard one factor model developed by Vasicek (1987). Many studies argue that this method cannot capture well the correlation between PD and LGD on a large (asymptotic) portfolio. The innovative approach of Witzany (2009) proposes a two factor model. Results of testing the model prove that it is able to estimate more punctually and as realistic as possible the correlation between the two parameters, implemented on real banking data. The lack of reliable information however on public LGDs in the Romanian banking sector makes further research difficult.

VI. Notes

- (1) Overdue loans are the ones that have been paid before the 90-day threshold.
- (2) Long term exposures are the ones that exhibit 5 years.

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VIII. Appendix

Table 1: Initial estimation, PIT PDs

Model 45: Logit, using 1220 observations
Dependent variable: DEFAULT

	coefficient	std. error
const	-12.0615	4.72765
COL_1	-5.69615e-07	2.25951e-07
FSIZE	1.33542	0.715938
HISTDEF	0.642915	0.140766
HISTDEL	-0.0886016	0.0502533
UTIL_3	1.11269	2.71241
CREDIT1		
BET_4		
MATURI		
GDP	-0.372822	1.77291

Source: Authors' calculations

Table 2: Adjusted estimation, TTC PDs

Model 3: Logit, using 1220 observations
Dependent variable: DEFAULT

	coefficient	std. error
const	-12.6307	4.76106
COL_1	-5.70913e-07	2.28224e-07
FSIZE	1.29090	0.722443
HISTDEF	0.639954	0.140788
HISTDEL	-0.0948422	0.0499572
UTIL_3	1.99794	2.57275
GDP_TTC		
CREDIT_TT		
BET_TTC_4		
MATURITY_TT_4	0.103762	0.893742

Source: Authors' calculations

	Adjustment			
	GDP	CREDIT	BET	MATURITY
Upward trend	1.31%	0.86%	0.47%	4.37%
Downward trend				-3.57%

Source: Authors' calculations

	Type of adjustment				
	GDP	CREDIT	BET	MATUR	TTC
R ²					0.16%

Source: Authors' calculations

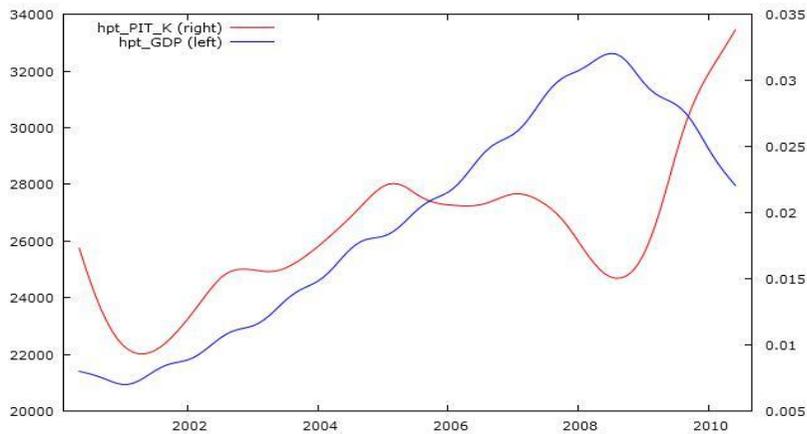


Figure 1: PIT Capital Requirements Vs. GDP growth

Source: Own calculations

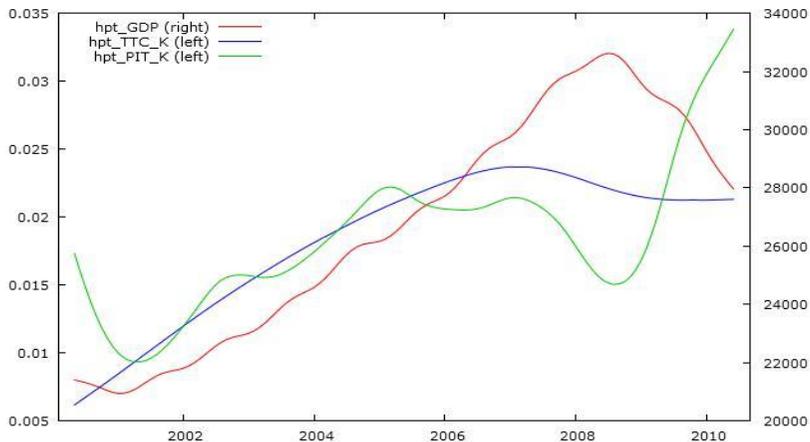


Figure 2: PIT Capital Requirements Vs. TTC Capital Requirements and GDP growth

Source: Own calculations

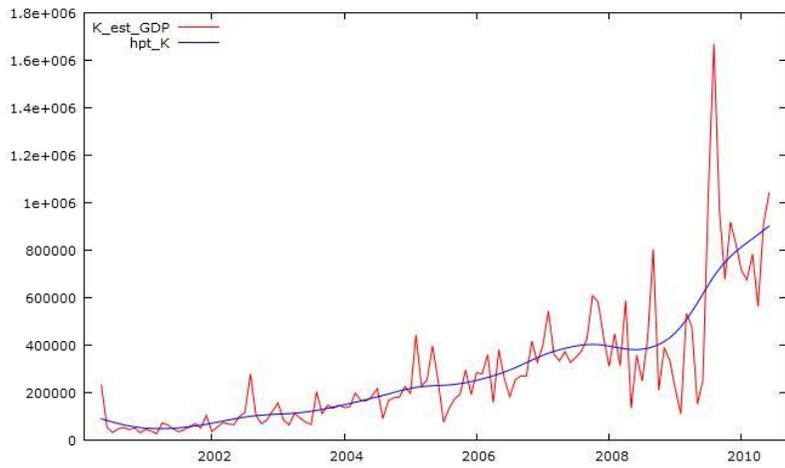


Figure 3: GDP-adjusted Capital Requirements Vs. GDP growth
Source: Own calculations

EXTERNAL FACTORS INFLUENCE ON INFLATION: THE CASE OF ROMANIA

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In this paper we try to assess the main external determinants of inflation dynamics in Romania. The literature in the field of measuring inflation dynamics is wealthy and various. There are many developing country - level studies that examine inflation dynamics: Blavy (2004) - Guinea, Duma (2008) - Sri Lanka, Gottschalk et al (2008) - Sierra Leone, Moriyama (2008) - Sudan, Mwase (2006) - Tanzania, Williams and Adedeji (2004) - Dominican Republic, Hossain (2005) - Indonesia, Almounsor (2010) - Yemen. The issue of Romanian inflation dynamics is present in many and various studies, like Hammermann (2007), Pelinescu and Dospinescu (2006), Budina et al (2006) etc. There are no other recent studies that analyze the external determinants on Romanian inflation dynamics.

In our paper we estimate an OLS single equation model, using a methodology derived from Almounsor (2010). The empirical analysis uses monthly data from August 2005 to January 2011. The start point of the data series is the moment of a major change in the National Bank of Romania (NBR) monetary policy: adoption of the inflation targeting regime. The independent variables used in our research are: harmonized consumer price index of EU-25 countries, EUR/RON exchange rate, crude oil price index (for analyzing the external shocks effect) and M2 monetary aggregate (intermediate money supply) as a control variable.

The outcomes suggest that inflation in Romania is driven mainly by international price shocks – harmonized consumer price index of EU-25 countries. The EUR/RON exchange rate depreciation has a small influence on domestic inflation. In the short run, the effect of the international oil price is insignificant. Money supply, used here as a control variable, is shown to have a very small effect on inflation in Romania when using OLS regressions. The results show that 66% of the domestic inflation variance is explained by the independent variables in our model.

Key words: inflation dynamics, external shock, international prices, exchange rate, Romania

JEL classification: E31, E52, E58

1. Introduction

In a world of fiat money inflation is a widely spread phenomenon that concerns both theorists and practitioners. The determinants of inflation can be split into two main categories: external and domestic factors. This paper assesses the main external determinants of inflation dynamics in Romania using an OLS single equation model. In this model, various regressions were performed to reach the benchmark regression, with the best fit and predictability. The period assessed is August 2005 – January 2011, highlighting the evolution of inflation under external shocks in a framework of inflation targeting monetary policy regime.

2. Literature Review

The literature in the field of measuring inflation dynamics is wealthy and various. Among them, there are many developing country level studies that examine inflation dynamics: Blavy (2004) - Guinea, Duma (2008) - Sri Lanka, Gottschalk et al (2008) - Sierra Leone, Moriyama (2008) - Sudan, Mwase (2006) - Tanzania, Williams and Adedeji (2004) - Dominican Republic, Hossain

(2005) - Indonesia etc. Almounsor (2010) studies the underlying determinants of inflation dynamics in Yemen using three different approaches: (i) a single equation model, (ii) a Structural Vector Autoregression Model, and (iii) a Vector Error Correction Model. The outcomes suggest that inflation dynamics in Yemen are driven by international price shocks, exchange rate depreciation, domestic demand shocks, and monetary innovations. Arratibel et al (2002) examine inflation dynamics in EU - accession countries in Central and Eastern Europe between 1990 and 2001, focusing particularly on the determinants of “dual inflation”, diverging inflation rates for tradable and non-tradable goods.

Also, there are many country level empirical studies on the effects of the exchange rate regime on inflation. Ghosh et al. (1997) conducted one of the first studies of this kind in a wide cross section of countries. Their analysis uses a tripartite classification system (“pegs”, “intermediate” and “float”) and includes the experience of 140 countries over the time period 1960 to 1990, using annual data.

The issue of Romanian inflation dynamics is also present in many and various studies. Hammermann (2007) uses panel estimation based on ten Central and Eastern European countries allowing him to decompose the inflation differential between Romania and the EU-8. The decomposition suggests that neither the revenue, nor the balance of payments, nor the financial stability motives are driving inflation; rather structural differences are at play. Pelinescu and Dospinescu (2006) focus on the short-term impact of changes in money, foreign exchange and wage policies and controlled prices, as well as the impact of the external shocks (as international price of oil) on future inflation in Romania. Their research uses VAR models to analyze the impact of factors like oil price and exchange rate on inflation and builds a model for predicting the inflation level in Romania. Budina et al (2006) demonstrate that for the period of 1992 – 2000 inflation was largely a monetary phenomenon in Romanian economy.

3. Methodology and Data

The empirical analysis uses monthly data from August 2005 to January 2011 (Appendix 1). The start point of the data series is the moment of a major change in the National Bank of Romania (NBR) monetary policy: adoption of the inflation targeting regime. This moment concur, also, with the privatization of the PETROM national oil company, at the end of 2004, when Romanian authorities quit administering the domestic fuel prices (a major determinant of domestic inflation).

We used data series from the IMF International Financial Statistics database (harmonized consumer price index in Romania (100=2005) - 96864HZF series and the M2 monetary aggregate in Romania - 96859MBZF series), from the Eurostat database (harmonized consumer price index of EU-25 countries (100=2005) and EUR/RON monthly average exchange rate series), from the Indexmundi database (crude oil price index (100=2005)) and National Statistics Institute of Romania (monthly average of the fuel price index, IPC102A series, transformed to consider 2005 the base year).

We used the EU-25 countries consumer price index as the Romanian external trade with other EU countries is prevalent (the EU27 data series already includes the Romanian price dynamics and is available only after year 2007). The EUR/RON exchange rate was also used due to the structure of the external trade of Romania; in the same time, euro is the main reserve currency of NBR. The international oil price may be relevant to the domestic inflation dynamics as most of the energy carriers in Romania are imported. To increase the robustness of our model we used the M2 monetary aggregate (intermediate money supply) as a control variable.

All data series were transformed as natural logarithms. We tested the data with the ADF unit root tests and the results showed that all the series (except the crude oil price index) are first order

integrated. Consequently we had to difference them once to obtain stationary data series (we also differenced the crude oil price index to may use the data in the regression).

The paper uses a methodology derived from the one used by Almounsor (2010). We have based our research on a single-equation model as follows:

$$\Delta p_t = \alpha + \beta_1 \Delta p_t^f + \beta_2 \Delta e_t + \beta_3 \Delta o + \beta_4 \Delta m_t + \phi z + \varepsilon_t \quad (1)$$

where Δ is the difference operator, p is the domestic HCPI, pf is the foreign (EU-25) HCPI, e is the EUR/RON exchange rate, o is the crude oil price index, m is the domestic M2 monetary aggregate (control variable), z is a set of binary variables controlling for outliers and ε is the error term.

Equation (1) states that inflation is driven by foreign inflation (pf), exchange rate (e) depreciation/appreciation, international oil prices (o) and growth of money supply (m), with the appropriate lags for the coefficients validation and AIC and SIC statistics minimization.

The model allows the analysis of the short term relationship of the variables with standard regression techniques. We tested for and eliminated the outliers (2007M8, 2007M9, 2010M1, 2010M7), based on the results of the RStudent test. To capture their impact, the paper uses four dummy variables. We tested the residuals' properties for checking the biasness, consistency and efficiency of the estimators.

As the domestic fuel price is an important component of the HCPI, we used the Johansen co-integration test for checking its long term relation with the international oil price.

4. Results

The results of equation (1) estimation are shown below:

$$\Delta p_t = 0.003 + 0.46^{***} \times \Delta p_{t-1}^f + 0.05^{**} \times \Delta e_{t-1} - 0.01^{***} \times \Delta o_{t-2} + 0.03^* \times \Delta m_{t-2} + \varepsilon_t$$

(0.00) (0.11) (0.02) (0.00) (0.01)

(2)

Note: values in parenthesis are the standard errors of the estimators; *** significant at 99%, ** significant at 95%, * significant at 90%; t-1 = one month lag, t-2 = two months lag

The outcomes of the single equation model show that Romania's inflation is driven mostly by international prices (with one month lag) and also by the exchange rate depreciation (pass-through). Empirically, a 1 percent increase in the EU-25 countries CPI amplifies the next month domestic prices by about 0.46 percent. The impact of exchange rate depreciation is significantly smaller: a 1 percent increase in the EUR/RON exchange rate is followed by a 0.05 percent increase of the next month domestic inflation.

The effect of international oil price is insignificant, a 1 percent increase driving to a decrease of about 0.01 percent of the domestic inflation (two months lagged). This result is quite surprising when observing the dynamics of the local fuel price and considering the weight of this component in the domestic HCPI. To confirm this outcome we have tested the two fuel price data series for co-integration and found out that the local fuel price is not driven by the international oil price, on a short run (Appendix 5).

Money supply, used here as a control variable, is shown to have a very small effect on inflation in Romania when using OLS regressions. Empirically, a 1 percent increase in the intermediate monetary aggregate adds two months lagged 0.03 percent to domestic inflation (however the coefficient is significant at 90% only).

The results show that 66% of the domestic inflation variance is explained by the independent variables in our model (Appendix 2).

5. Conclusions

The outcomes suggest that inflation in Romania is driven mainly by international price shocks – harmonized consumer price index of EU-25 countries. The EUR/RON exchange rate depreciation has a small influence on domestic inflation. In the short run, the effect of the international oil price is insignificant. Money supply, used here as a control variable, is shown to have a very small effect on inflation in Romania when using OLS regressions. The results show that 66% of the domestic inflation variance is explained by the independent variables in our model.

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Appendix 1: Data series

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	2005											
HCPIRO	--	--	--	--	--	--	--	100.6	101.2	102.1	103.3	103.9
HCPIEU25	--	--	--	--	--	--	--	100.3	100.7	101.0	100.8	101.0
EURRON	--	--	--	--	--	--	--	3.50	3.51	3.60	3.65	3.66
OIL	--	--	--	--	--	--	--	116.0	115.6	109.0	103.2	105.8
M2	--	--	--	--	--	--	--	76.7	80.2	81.1	81.4	86.3
COMBUSTIBILI	--	--	--	--	--	--	--	106.7	110.2	110.3	109.2	109.0
	2006											
HCPIRO	105.0	105.2	105.4	105.9	106.5	106.7	106.8	106.7	106.8	107.0	108.2	109.0
HCPIEU25	100.6	100.9	101.4	102.1	102.4	102.5	102.4	102.6	102.7	102.7	102.8	103.2
EURRON	3.64	3.54	3.51	3.49	3.51	3.55	3.57	3.53	3.53	3.52	3.50	3.41
OIL	117.1	112.1	114.3	127.6	128.9	128.2	136.0	134.8	116.6	108.8	109.2	114.5
M2	85.7	85.7	87.5	88.0	91.7	95.1	95.9	98.3	99.3	100.6	101.9	111.7
COMBUSTIBILI	109.6	109.4	109.2	109.4	110.8	111.1	111.9	112.6	113.1	112.3	110.9	110.5
	2007											
HCPIRO	109.2	109.3	109.4	109.9	110.6	110.8	111.2	112.1	113.3	114.4	115.5	116.3
HCPIEU25	102.7	103.1	103.7	104.3	104.6	104.7	104.4	104.5	104.9	105.4	105.9	106.4
EURRON	3.39	3.38	3.37	3.33	3.28	3.22	3.13	3.22	3.35	3.35	3.47	3.54
OIL	100.5	108.1	113.9	122.3	122.5	128.1	138.1	131.6	144.1	153.8	171.4	168.1
M2	106.3	109.2	112.4	112.9	112.7	116.1	119.9	124.3	126.5	128.7	136.1	147.9
COMBUSTIBILI	109.7	108.4	108.4	110.2	112.0	112.4	112.4	112.1	112.3	113.1	115.0	116.7
	2008											
HCPIRO	117.2	118.1	118.9	119.5	120.1	120.4	121.3	121.2	121.7	123.0	123.4	123.7
HCPIEU25	106.1	106.6	107.5	107.9	108.6	109.0	108.9	108.9	109.2	109.2	108.7	108.6
EURRON	3.69	3.66	3.72	3.64	3.66	3.66	3.58	3.53	3.62	3.75	3.78	3.92
OIL	170.3	175.3	191.1	204.2	230.5	247.0	249.7	215.3	187.1	136.3	101.2	77.7
M2	147.4	149.7	152.0	157.0	157.6	161.5	161.2	162.3	166.0	162.1	164.4	173.7
COMBUSTIBILI	117.5	119.0	121.8	124.2	127.0	128.6	130.4	129.3	129.3	128.9	124.6	119.9
	2009											
HCPIRO	125.2	126.2	126.9	127.2	127.2	127.5	127.4	127.2	127.6	128.2	129.1	129.5
HCPIEU25	107.8	108.4	108.8	109.1	109.4	109.6	109.1	109.4	109.4	109.6	109.8	110.1
EURRON	4.24	4.29	4.28	4.20	4.17	4.21	4.22	4.22	4.24	4.29	4.29	4.23
OIL	82.6	78.8	87.9	94.6	109.3	130.0	121.6	134.7	128.5	139.2	145.8	140.9
M2	175.8	175.8	174.9	175.8	176.2	179.5	180.4	182.8	182.5	182.6	184.1	188.0
COMBUSTIBILI	121.7	125.7	126.6	126.9	127.5	130.2	131.2	132.9	132.4	133.8	136.1	135.7
	2010											
HCPIRO	131.7	131.9	132.2	132.6	132.8	133.0	136.5	136.8	137.5	138.3	139.0	139.8
HCPIEU25	109.5	109.9	110.9	111.4	111.6	111.6	111.2	111.4	111.7	112.0	112.2	112.9
EURRON	4.14	4.12	4.09	4.13	4.18	4.24	4.26	4.24	4.27	4.28	4.29	4.29
OIL	145.0	140.4	148.9	158.1	142.2	140.4	140.0	142.6	143.1	153.6	158.9	169.3
M2	184.3	185.7	187.8	188.3	190.1	192.3	190.8	192.7	192.6	191.7	194.2	199.6
COMBUSTIBILI	140.3	140.1	142.9	144.3	144.9	145.5	148.9	147.9	149.9	150.9	152.1	156.5
	2011											
HCPIRO	140.9	--	--	--	--	--	--	--	--	--	--	--
HCPIEU25	112.4	--	--	--	--	--	--	--	--	--	--	--
EURRON	4.26	--	--	--	--	--	--	--	--	--	--	--
OIL	174.3	--	--	--	--	--	--	--	--	--	--	--
M2	196.0	--	--	--	--	--	--	--	--	--	--	--
COMBUSTIBILI	159.9	--	--	--	--	--	--	--	--	--	--	--

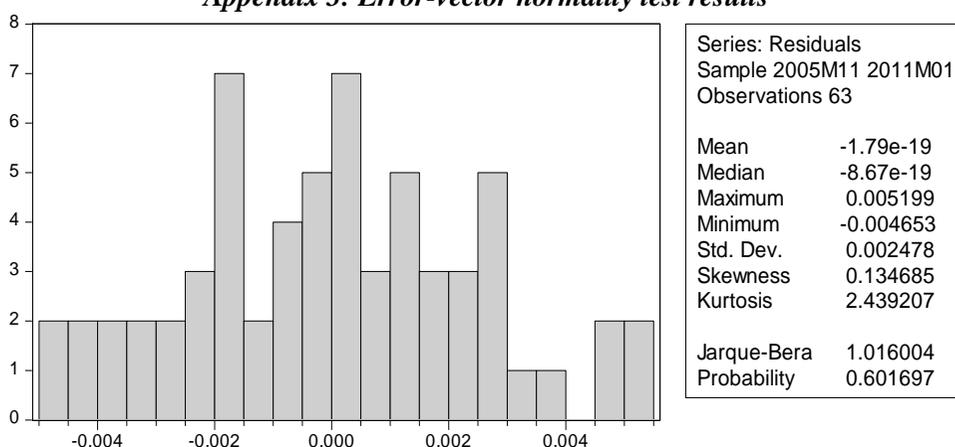
Note: HCPIRO = harmonized consumer price index in Romania, HCPIEU25 = harmonized consumer price index in EU-25 countries, M2 = M2 monetary aggregate, EURRON = EUR/RON exchange rate, OIL = foreign crude oil price index

Appendix 2: Main regression statistics

Dependent Variable: DLOG(HCPIRO)
 Method: Least Squares
 Sample (adjusted): 2005M11 2011M01
 Included observations: 63 after adjustments

R-squared	0.705091	Mean dependent var	0.005107
Adjusted R-squared	0.661401	S.D. dependent var	0.004563
S.E. of regression	0.002655	Akaike info criterion	-8.892853
Sum squared resid	0.000381	Schwarz criterion	-8.586691
Log likelihood	289.1249	Hannan-Quinn criter.	-8.772438
F-statistic	16.13840	Durbin-Watson stat	1.555438
Prob(F-statistic)	0.000000		

Appendix 3: Error-vector normality test results



Appendix 3: Error-vector autocorrelation test results

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.812487	Prob. F(3,51)	0.1566
Obs*R-squared	6.069728	Prob. Chi-Square(3)	0.1083

Appendix 4: Error-vector heteroscedasticity test results

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.321230	Prob. F(8,54)	0.2530
Obs*R-squared	10.31287	Prob. Chi-Square(8)	0.2437
Scaled explained SS	5.452293	Prob. Chi-Square(8)	0.7083

Appendix 5: Domestic and international fuel price co-integration test

Sample (adjusted): 2005M11 2011M01

Included observations: 63 after adjustments

Trend assumption: Linear deterministic trend

Series: COMBUSTIBILI OIL

Lags interval (in first differences): 1 to 2

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.246054	26.75971	15.49471	0.0007
At most 1 *	0.132658	8.966305	3.841466	0.0028

Trace test indicates 2 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

COORDINATES AND OBJECTIVES OF ROMANIAN FISCAL POLICY

Caraiman Adrian-Cosmin

Fiscal policy includes the totality of methods, means, instruments and institutions which are used for procuring financial resources necessary for financing public activities and also for influence the evolution of the economy of a certain geographic area, usually by direct reporting to a state's territory "(1)" (El-Agraa 2004: 319).

Fiscal policy is promoted in a close relationship with measures of budgetary policy, monetary policy and in interdependence with policy of prices and policy of labor occupation and other economic policies "(2)" (Voinea 2009: 75).

I consider that only an efficient coordination in fiscal and monetary policy may have as a final objective the stabilization of economy, with a high degree of labor occupation and a price stability.

A current controversy especially with Anglo-Saxons is the one according to which *fiscal policy* has the sense of *financial policy*, including, on the one side the objectives of the deciding factor of one state as regard to procuring budgetary resources by means of taxes and fees, and on the other side the objectives appearing out of the activity of making public expenses. On the opposite side are the materials in different languages of which origin is Latin, where, *fiscal policy* is seen as being state's policy that makes reference strictly at taxes, being ascertained that the part regarding the expense of the public resources makes express reference to budgetary policy.

In this sense, the author Iulian Văcărel, subscribes to the last position presented, respectively to the Latin one, and separates *fiscal policy* of *the budgetary policy*. Therefore, according to him, "Romanian language being a Latin language, has in its vocabulary, for centuries, distinct expressions for state's policy referring to taxes (fiscal policy) and the one regarding to public expenses (financial policy in matters of public expenses or simple budgetary policy)" "(3)" (Văcărel 2001: 40-41).

On my opinion, certainly, the fiscal policy is an important component of the financial policy, although there are different points of view within this approach. Thereby, there is the tendency to define fiscal policy strictly by means of collecting public financial resources under the form of taxes and fees. In this sense, according to Mr. Ioan Condor, "fiscal policy comprises the assembly of regulations regarding the establishment and charge of taxes, fees and other public incomes, that characterizes state's options in matters of taxes and fees" "(4)" (Condor 2002: 16).

In the same context, Mr. Babaita I. considers fiscal policy "a mechanism of sampling one part of the incomes made by the economic agents, households and enterprises, for constituting the funds necessary for public expenses "(5)"(Băbăiță, Silași and Duță 1999: 294).

Of course that all these definitions are heavily criticized by the supporters of the Anglo-Saxon opinions, or of the international organizations. Such, the last years witnessed to more frequent critics against the definitions presented previously, of the fiscal policy.

Paul A. Samuelson, defines fiscal policy as being "a process consisting in the manipulation of taxes and public expenses", emphasizing also that "governmental expenses and taxes have three major effects.. First of all, they are affecting the general distribution of the national product between public consumption and investments. Secondly, by means of direct expenses, indirect incentives and regulation empowerments, the government influences the production and price of the products made in different activity fields. At the end, budgetary policy influences the macroeconomic activities - the fluctuation of the aggregate production, prices and unemployment "(6)" (Samuelson 2001: 364)". Here's by consequence the relief of the tight connection between taxes and budgetary expenses. His opinion is sustained also by Richard G. Lipsey which believes

that "the ability of the government to use its power of taxation and expense for influence its national level" must be verified and followed with great care, especially in the context where "the governmental plans for taxes and expenses are defining the fiscal policy, with important effects over the level of income both on long term and also on short term. "(7)" (Lipsey, Chrystal 1999: 624) "

Leaving on one side the opinions of origin other that Romanian, there are also specialty authors in Romanian literature that subscribe to this opinion. For example Ms. Mihaela Onofrei which considers that "the main deficiency is that in the content of the fiscal policy is not made any reference to public expenses "(8)" (Onofrei 2000: 22) "

Also, the connection between the fiscal incomes and budgetary expenses is strongly emphasized also in the next definition, where fiscal policy represents the mechanism of collecting one part from the incomes that follow to represent the funds necessary for budgetary expenses. In this sense, the success of fiscal policy is conditioned by the "ration between expenses and fiscal incomes that may be delivered by the economic agents, without being discouraged in their activity. "(9)" (Băbăiță, Silași and Duță 1999: 294). "

Dan Drosu Șaguna defines fiscal policy by means of an "assembly of intervention instruments of the state, generated by financial fiscal-specific processes: forming by taxes and fees, budgetary expenses, allocating budgetary expenses, ensuring budgetary balances "(10)" (Șaguna 2001: 602) ". From my point of view, this dilemma of the fiscal policy is clearly presented by Mr. Vacarel Iulian which considers that the notion of fiscal policy makes strict reference to "taxes and fees, differentiating budgetary policy against the fiscal one." "(11)" (Văcărel 2001: 40)

For obtaining an adequate system of voluntary acceptable of the fiscal obligations by the taxpayers, exists four major ways to act, to which - within an efficient fiscal system - is necessary to have granted a permanent attention "(12)" (Mihăilescu 2002: 68):

1. the continued operation of certain programs as comprehensive for fiscal education of the taxpayers;
2. simplifying the system for declaring and paying taxes and fees;
3. detecting with promptness and forced execution of the taxpayers that are not complying with the obligations against the budget;
4. the continued improvement of the fiscal control in the purpose of identifying and fighting against fiscal evasion.

In my opinion the main objective that must become priority is the one of a good tax and fee collection for state budget and not the increase of the fiscality.

In conclusion we can say that, by fiscal policy are established, mainly, the volume and provenience of the public financial resources, methods of sampling the fiscal incomes, fiscal facilities - if they are granted, under what form, targeted finalities, global objectives of the fiscal policy, and also firm ways to achieve them.

Between the **fiscal policy coordinates** from Romania, we can remember:

- level of the public financial resources, possibilities to maintain/ ensure the budgetary balance, provenience of the public financial resources, number/ multitude of the fiscal assays, methods and techniques of fiscal assay, level of the rate of fiscal pressure, modalities for fighting against and limiting fiscal evasion, granting / not granting fiscal facilities.

The volume of the public financial resources, their quantum, is dictated in the largest part by the level of the public expenses form the considered period. In practice of public finances, from the past years is seen that there doesn't exist a total equity between public incomes of ordinary nature and public expenses within the budgetary year, which generated budgetary deficiencies of which source of finance is of public credits nature.

An important coordinate of the fiscal policy consists of the provenience of public financial resources: from ordinary or extraordinary sources, procuring the ordinary ones on way of direct or indirect taxes, from legal persons or individuals. Normally, the highest proportion must return to the ordinary financial resources, comparatively with procuring a public credit. The monetary emission without coverage represents a source of public incomes presented only on theory, because of the strong inflationist effects that it causes.

In a fully structuring economy, an important decision regarding the provenience of the public financial resources is connected to the method of taxation of the private economic agents comparatively with the companies and companies with state major capital and with autonomous administrations. The fiscal authority may promote a fiscal policy which to treat all of them in the same way or differently. As regard to the taxation of legal persons and individuals, may be considered a proportional taxation, or in simple progressive shares or composed shares. Because of certain considerations the poet establishes taxation shares depending on the activity field, geographical area or the headquarters of the economic agent.

Depending on how will answer to such aspects, the fiscal policy will choose to ensure horizontal and/ or vertical fiscal equity, so as to achieve the objective of social justice, and also the one of ensuring a decent way of living for taxpayers with small and middle incomes.

By fiscal policy are established also mandatory assays under the aspect of the number and ways of assay. Also the ones in charge from the fiscal policy field must follow permanently the evolution of the fiscal pressure in economy, at the level of the economic agent and at individual level and to correlate its level with the volume of the fiscal incomes form the budget.

Another coordinate of high importance within the frame of fiscal policy is consisting of locating, measuring, limiting and preventing the phenomenon of fiscal evasion. In this respect, a special importance returns to certain aspects, such as: level of fiscality, degree of collection of fiscal assays, degree of realism in establishing fiscal incomes in the budget, level of professionalism of the activity of fiscal inspection, duration of the sanctions provided in cases of fiscal evasion and firmness of their application, etc.

I consider that state's fiscal policy has an important role in ensuring the general economic balance, by maintaining the budgetary balance. Within this matter, the analysis must target aspects such as: the difference between the volume of public expenses and the one of public financial resources possibly to mobilize in normal conditions within the budget, the ratio between the budgetary deficiency and gross domestic product (under conditions in which must be complied with the recommendations of the international bodies in this field), sources of coverage for the budgetary deficiency, etc.

The fiscal policy acts over the consumption by modifying the solvable request of the population. Thereby, when is followed the reduction in consumption, generally, is used the increase in fiscality. Is intended the orientation of the consumption request to certain products, the instrument is represented by general consumption taxes or special consumption taxes - by selecting the subject products and differentiation of the tax rate. The public expenses are affecting directly the consumption by goods and services acquisitions and, indirectly, particular request, by social transfers and remuneration granted to public clerks. On their turn, taxes reduce the income of the legal persons and individuals, affecting, as a consequence, consumption and investments "(13)" (Cioponea 2007: 372).

For sensing the fiscal directions of the Romanian economy I consider that we must have in point a provision and an anticipation of the decision of the governmental responsible and political responsible, but which, usually, are difficult to anticipate and quantify. Must be seen some tendencies of certain general coordinates detached from a pragmatic attitude which emphasizes the efficiency of the actual system.

Fiscal system represents an instrument of assay and directing of the state's income, used with interventionist purpose in economy. It produces a conflict in modifying the price, generating re-distributions of income that may influence negatively the activity of economic agents and taxpayers, in general. The fiscal policy may therefore confront with problems connected to the optimization of the fiscal system capable to stimulate the effort to produce, to save and to invest. Romania is currently confronting with a very large number of taxes and fees and some of them are unjustified or are against the principles of taxation. For ensuring the maximization of the fiscal system flow, without the fiscal pressure to become unbearable, is imposed the rejection of the fiscal facilities that destroy neutrality and stimulate legal fiscal evasion.

The deterrence and removal of fiscal fraud asks that, together with the increase of the fiscal penalties, to be modified also the legislation of fiscal evasion, being introduced administrative and criminal penalties more drastic and more diversified. The fiscality is not neutral in relation with the investment decision, but influences the evolution or collapse of the investments in economy.

Both fiscal and monetary policy intervene over the economics flows, acting over the growth or decrease of the distributed incomes, used for consumption, saved and invested. Level and distribution of the incomes at national level influences the decisions of fiscal policy. The maximization of the national income per inhabitant must have in consideration the influence over the taxes on different incomes realized. The increase of the pressure exerted on these must be avoided for determining the decrease of the production in general. Also, the tax on salaries, on profit and on consumption reduces the incomes that may be saved and invested at individual and global level.

The increase of the profits invested is stimulating, in my opinion, the increase of the wage incomes and capital accumulation. The facilities which must be included in fiscal legislation must have in consideration the constitution of the monetary excess for new investments and increase of the computation base for future taxes.

Public authorities use the fiscal policy to achieve new non-fiscal targets, of economic order, such as: influence of economic processes, correction of the economic cycle, removal of the imbalance from economics. In this sense, following the most general directions on which sits fiscal policies, we can distinct, as global **objectives** of the fiscal policy the following:

- economic stabilization, conjunctural adjustment and re-launching the economy, economic restructuring and growth, modernization of the productive apparatus.

The main objective of the fiscal policy, in my opinion, targets the economic stability. For achieving this objective, in recession period, the fiscal policy, targets the reduction of taxes and fees concomitantly with the increase in public expenses. In the period in which the agregate request tends to become excessive generating mainly the increase of prices and budgetary deficiency, the fiscal policy uses an increase of the taxes and/ or reduction of the public expenses. The conjunctural adjustment and re-launching of the economy is tightly connected to the mix of financial - monetary policies. For achieving the objective regarding the restructuring and economic increase, the fiscal policy encourages the development of certain economic sectors or activities either by reducing tax rates, either by granting fiscal facilities. These activities are targeting among others social objectives often directed to discouraging the consumption of certain products bad for health, the stimulation of the taxpayers for charity, etc.

The modernization of the productive apparatus is an intermediary objective of the fiscal policy which is tightly connected to the development of the external trade and increase of the competiveness of the autochthonous economy on the international market. This objective is achieved, many times by reducing the tax rates for economic agents according to the profit that is invested, by granting fiscal deductions for a share of the value of the investments made, by favoring the saving, etc.

In my opinion the objectives of fiscal policy are very close correlated with the functions of the policy and with their effects over the national economy, and also with results obtained by using taxes, state loans, budgetary expenses, as intervention instruments at the disposition of the public authorities.

Conclusions:

A state's fiscal policy affects directly all the taxpayers, both legal persons and individuals. A well based fiscal policy, that considers the strict conditions of the social and economic life, the exigencies of the present and imperatives of the future, may be prove to be beneficial for the progress; in return, unless is referring them or considers them, fiscal policy may obstruct the development and may lead to recession. Therefore the fiscal policy must be approached in close connection with budgetary policy. Their objectives must support the achievement of a durable development of the entire Romanian society.

The fiscal policy must be used in favor of the economic growth, for reducing the inflation, the unemployment and deficiency of current account; the budgetary deficiency and public debt must be held under control, fiscal policy must be made so as to support the nominal and real convergence, in the same time being sufficiently flexible for alleviating the eventual internal and external shocks generated by the adhesion, regarding the successful integration in the monetary and fiscal structures of the European Union.

Note:

1 El-Agraa, A., M., *Tax Harmonization*, în volumul „*The European Union: Economics and Policies*”, Cambridge Publishing House, 2004, p. 319.

2 Voinea, Gh., *Legislație fiscală, suport de curs pentru studenții masteranzi*, Facultatea de Economie și Administrarea Afacerilor, Universitatea Alexandru Ioan Cuza, Iași, 2009, p. 75.

3 Văcărel, I., *Politici fiscale și bugetare în România - 1990 -2000*, Editura Expert, București, 2001, p. 40-41.

4 Condor, I., *Reforma fiscală-armonizată cerințelor UE*, *Adevărul economic*, nr. 47 (555), 2002, p.16.

5 Băbăiță, I., Silași, G., Duță, Alexandrina, *Macroeconomia*, Editura Orizonturi Universitare, Timișoara, 1999, p. 294.

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10 Șaguna, D.,D., *Tratat de drept financiar și fiscal*, Editura CH Beck, București, 2001, p. 602.

11 Văcărel, I., op.cit, p. 40.

12 Mihăilescu, I., *Sisteme comparate de impozite și taxe*, Ed. Independența Economică, Pitești, 2002, p. 68.

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THE IMPACT OF THE FINANCIAL AND ECONOMIC GLOBAL CRISIS OVER THE ROMANIAN BANKING SYSTEM

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This paper analyzes the evolution of the Romanian banking system during 2007 - 2010 compared to the same segment of financial market dynamics in the Member States. Also seeks to detect the effects of the global financial and economic crisis on lending activity, the management of liquidity risk and thereby the effect on the profitability of the Romanian banking sector and outline the prospects of further development.

The macroeconomic and financial international background has undergone negative changes, especially in the autumn of 2008. Romania's financial system has evolved but strongly marked by the virulent manifestations of global financial and economic crisis. The banking system which is the dominant component in the financial system is well capitalized, has resisted, until now, these pressures, without recording any bankruptcy.

As a lending crunch from the increase in provision expenses, against the backdrop of bad loans it seems to be a poor performance of the banking system for the future period, taking into account the negative financial result recorded at the end of 2010.

Given the high degree of capitalization, liquidity level indicators, on this, consider that local banks are well placed to support the real economy on long-term lending conditions imposed by prudential regulations in the field.

Currently, at the level of the Romanian banking system, we consider it is necessary to continue the measures imposed by the monetary authority to ensure the reduction of uncertainty and reassure market participants in future developments, as trust is the essential factor for the crisis. In this sense, we consider very important the debate, the direct involvement of representatives of the central bank and academic themes reflecting the current state of the Romanian financial system, lessons learned from the crisis and Romania's objectives for the future - providing a sustainable process of nominal and real convergence of the Romanian economy - towards European integration in a not too distant horizon.

Keywords: financial crisis, Romanian banking system, non-performing loans, profitability

JEL classification: G01, G2, E51

Introduction

The current crisis has occasioned extensive debate on its causes and devastating effects on the banking sector, which is the largest regulated compared with other sectors of the financial market.

Comparing banking crises in the period 2008 - 2009 by the Great Depression (Richhild Moessner and William A. Allen 2010:11) shows that the size of the current crisis, commensurated with the decrease in international short-term borrowing and the amount of bank deposits was lower than the one in 1931. However, the amount of liquidity provided by central banks was higher than in 1931, when it was restricted by using the gold standard in most of the states.

The Professor (Silviu Cerna, 2010:79) notes the same thing, “the current crisis is very similar with other crises from the past”.

(Marie Stephanie Stolz and Michael Wedow 2010:7) believes that consistent public support for the financial sector was the key to managing the current financial crisis.

The literature also suggests that the recent crisis reflects not only the unsustainability of global macroeconomic imbalances, but also proliferation of toxic financial instruments, a lack of authority of supervisors and unclear demarcation of the powers of the regulator.

The factors mentioned above, according to (Ross Levine, 2010: 3,7) have played a partial part. The submission of inadequate policies has created, in fact, vicious incentives which have encouraged the financial institutions to take excessive risks, diverting the public savings to unproductive targets. He also argues that there are major contradictions between a dynamic financial system and a regulatory system that failed to properly adapt to financial innovation. Thus, failures of governance in financial regulation have supported the international financial crisis.

Measures taken by governments and central banks in the U.S. and the EU in response to the crisis have been broadly similar. Thus, firstly, there have been used broadly the same instruments such as government guarantees, capital injection of liquidity, asset protection, secondly all were in used similar scope. Also, monetary policy actions and measures to rescue banks were increasingly intertwined. But as it is highlighted by (Marie Stephanie Stolz and Michael Wedow 2010: 16) there are important differences between the measures of political support taken by the U.S. and EU. While the Fed was more expansive and focused more on the individual financial intermediaries, the Euro system's operations were limited to providing liquidity.

In Romania, the state did not have to intervene to save the banks from the global financial maelstrom, as happened in the above areas, particularly in the U.S..

In the period 2009 - 2010, additional capitalization was provided entirely by the shareholders in case of entities within the Romanian banking system.

This paper is structured so as to allow exposure of the latest developments in the Romanian banking system in the period 2007 - 2010, being strongly marked by virulent manifestations of the global crisis and to outline future trends for the future period.

1. The Characteristics of the Romanian banking sector

The effects of financial and economic global crisis have intensely impacted the first months of 2009 and the financial system in Romania, namely the banking sector which is the dominant component in it. By the time Romania joined the European Union (1st of January, 2007), the industry has come a long process of privatization which was long overdue and which resulted in a strong infusion of foreign capital. In large part, the banks in the system are majority foreign-owned (76.9%), and their share in total bank assets is (86.1%), according to the latest developments (Table no. 1).

Table no. 1. Structural indicators of the Romanian banking system

	2007	2008	2009	2010
Number of credit institutions	42	43	42	42
Number of banks with private capital majority	40	41	40	40
Number of foreign-owned majority capital banks, from which:	36	37	35	35
- Branches of foreign banks	10	10	10	9
Share in total assets of banks with majority private capital (%)	94,7	94,6	92,5	93,2
Share in total assets of banks	88	88,2	85,3	86,1

	2007	2008	2009	2010
with majority foreign capital (%)				
Share of top five banks in total assets(%)	56,3	54,3	52,4	53,1
Herfindahl – Hirschman parameter	1.046	926	857	874

Source: National Bank of Romania

As shares in the share capital of domestic banks and foreign branches in late 2009, the first three positions were occupied by Greece (26.6%) held position at the end of 2008, Austria (16.9%) and Netherlands (9.0%).

As one can see in the table above, during 2007 - 2010, the Romanian banking sector structure in terms of number of credit institutions and foreign capital share in total sector assets examined, has not encountered significant changes.

Instead, it should be noted that the degree of concentration in the Romanian banking system remains a downward trend throughout the analysis period since 2007, as we show the Herfindahl - Hirschman Index (HHI), which is calculated by:

$$IHH = \sum_{i=1}^n \left(\frac{A_i}{A} \times 100 \right)^2, i=1, \dots, n \quad (1)$$

where: A_i = corresponding to period-end balance sheet net assets of the credit institution “i”;
 A = the aggregate net level of the balance sheet asset (from the total banking system).

It should be noted that for values between 1000 and 1800, the Herfindahl - Hirschman parameter means an average concentration of the banking system. For Romania, the concentration of the banking system remains at a moderate level, which is below the EU average of 1120 points for 2008 (Mugur Isărescu, 2009: 319).

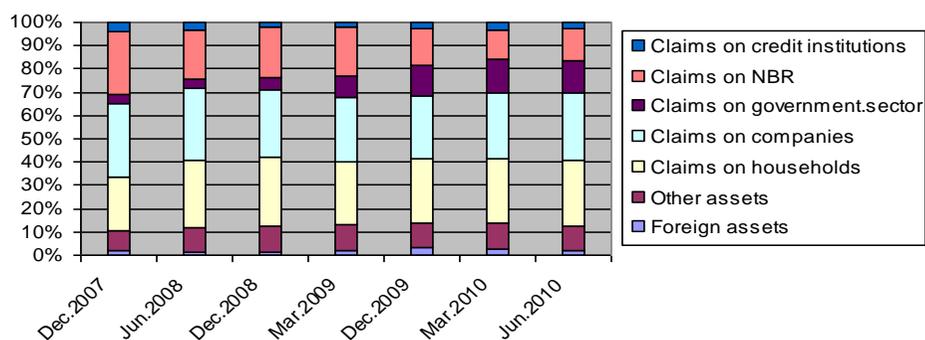
With regards to the level of financial intermediation calculated as a percentage of non-government Domestic Product (GDP), Romania remains below the EU Member States, namely below 50%, although in recent years, it has recorded a very high government credit rate, until the autumn of 2008, due to uncertainties caused by the global financial crisis.

2. The impact of the financial crisis over the lending banking sector

Since the first quarter of 2009 and so far, the international financial crisis had an impact on the Romanian banking sector, in particular over the external liquidity channel, also the macroeconomic conditions were significantly affected. Thus, the Romanian economy went into negative territory where real GDP registered a severe contraction (by 7.1% in the year 2009) and (1.3% in the year 2010) and the fiscal deficit rose to 8.3% of GDP for 2009.

Amid the problems outlined above, during 2009-2010, there were significant changes in the dynamics and structure of the Romanian banking system assets (Chart no. 1).

Chart No. 1 Structure of the Romanian banking sector assets



Source: the author

During 2009, credit released to the private sector registered a contraction for government securities, which rose 3.7 times at end 2010 compared to 2007, under the bank's risk aversion and uncertainty about future developments to maintain the domestic and financial international market.

Being noted that in June 2010 there has been noticed a return of non-governmental credit, an increase of 6.4% compared to June 2009.

It also notes that investments of domestic credit institutions had a decreasing trend over the period, the fund reserve ratio reductions level operated by the central bank. However, foreign assets have a slightly upward trend, increasing balance of loans due to non-euro residents.

3. Quality assets and significant risks

First, we deem it necessary to present, in the context of deteriorating domestic economic climate more pronounced in January 2009-September 2010 and existing liquidity problems on international markets, changing the behavior of the Romanian banking system, which is much more cautious in lending.

According to the evolution of the data in (Table no. 2), it concludes that we have overcome a well-capitalized banking system, the levels recorded at the two indicators: solvency and leverage, in the period, are maintained at an appropriate level above the regulatory minimum (8%) and harmonized with those in force in EU. The Solvency parameter is maintained at the same level in the last two years, the fund raising of capital by shareholders reduce credit and non-government credit growth.

Table No. 2. The main prudential indicators

Indicators		Dec.07	Dec.08	Dec.09	Dec.10
Capital adequacy					
1	Solvency ratio (>8%)	13,78	13,76	14,67	14,66
2	Leverage ratio (Tier 1 capital/ Total assets, average)	7,32	8,13	7,55	7,87
Asset quality					
3	Loans (gross value)/ Total assets (gross value)	59,09	62,50	59,13	58,66
4	Interbank placements and loans	29,98	26,01	23,03	19,59

	Indicators	Dec.07	Dec.08	Dec.09	Dec.10
	(gross value) / Total assets (gross value)				
5	Past-due and doubtful loans / Total loan portfolio (net value)	0,22	0,32	1,45	2,22
6	Past-due and doubtful claims / Total assets (net value)	0,17	0,29	1,01	1,49
7	Credit risk ratio	4,00	6,52	15,29	20,81
8	General risk ratio	56,94	50,73	47,29	44,56
Liquidity					
9	Cash ratio	38,70	34,43	35,28	35,9
10	Liquidity ratio (effective liquidity/ required liquidity)	2,13	2,47	1,38	1,36
11	Loans to clients / Deposits from clients	108,7	122,0	112,80	117,95
Profitability					
12	ROA (Net profit/ Total assets, average)	1,01	1,56	0,25	-0,09
13	ROE (Net profit/ Own capital, average)	9,43	17,04	2,89	-1,02

Source: National Bank of Romania

In the period 2009 - 2010, lending activity registered a downward trend, just as the indicator shows the evolution of credit extended to customers in total assets, the gross amount, from 59.13% to 58.66% in December 2009 and at the end of 2010, compared to 62.50 lei as it was before the crisis.

In this case, both supply and demand for credit continued to be influenced by several factors, such as the supply side - (i) maintaining tighter lending standards and terms, (ii) reducing the excess liquidity inside the banking system, (iii) increase of government securities held by credit institutions. At the level of loan demand inhibitors were the most important factors were: (a) maintaining the high cost of credit, (b) the volatility of currency exchange rate, (c) negative view of economic growth and unemployment and (d) the increasing inclination for people to save.

According to the unfavorable evolution of the indicators that reflect the quality of loan portfolio which has increased the vulnerability of the banking system over the period analyzed. Thus, credit risk, which is considered one of the most important risks in recent years has gained a high level in the late 2010 and 20.81% compared to the level before the crisis, 4.00%.

The results of the stress testing exercise over the credit institutions run by the NBR in July 2010 for a two-year horizon, show us that the impact on loan portfolio quality is significant. Increased costs (provisions) that the impairment of financial assets was approximated to 38% in 2010 and 21% for 2011, this trend is confirmed in practice.

In December 2009, loan portfolio quality in the banking sectors in the EU Member States had the same negative trend as in Romania, their level doubled from the previous period. In late 2008, the rate loans/ deposits reached 122%, and in February 2009 began to decline due to the concentration of the banking entities to attract deposits from customers and lending moderation. The ratio level at 31st of December 2010, of 117.8% indicates limited level of liquidity in the system.

4. Profitability of the banking system – trends

At the end of 2009, the Romanian banking system registered a net profit of 193 million euros. Compared with 2008, the aggregate profit fell more than 5 times because of bad loans and thus increased the spending provisions to cover credit risk assumed combined with low incomes.

An entirely different situation is found in the year 2010 when the Romanian banking system registered a negative financial result - an aggregate cash net loss of 71 million. The main factors affecting the profitability of the system in 2010 were: the relative lack of liquidity of foreign markets, indirectly affecting bank operations in Romania, increased risk aversion of banks and increased provision expenses.

Thus, both ROA and ROE indicators (Table No. 2) have negative values at the end of 2010 (-0.09% and -1.02%).

Here, given the current circumstances, we conclude that the profitability of the banking system will remain under pressure, given the unfavorable trend of deterioration in asset quality, which involves increasingly reserves, according to delay economic recovery, amid a recession and persistency in a limited risk appetite for banks.

Conclusions

Currently, at the level of the Romanian banking system, we consider it is necessary to continue the measures imposed by the monetary authority to ensure the reduction of uncertainty and reassure market participants in future developments, as trust is the essential factor for the crisis. In this sense, we consider very important the debate, the direct involvement of representatives of the central bank and academic themes reflecting the current state of the Romanian financial system, lessons learned from the crisis and Romania's objectives for the future - providing a sustainable process of nominal and real convergence of the Romanian economy-towards European integration in a not too distant horizon.

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FLUCTUATION IN PENSION FUND ASSETS PRIVATELY MANAGED UNDER THE INFLUENCE OF CERTAIN FACTORS. STATISTICAL STUDY IN ROMANIA

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On international level, the economic and financial crisis has determined a diminution of the asset value of compulsory pension funds, reflecting a reallocation of funds towards alternative or low-risk investments. The present paper indicates how the net asset value of privately managed pension funds in Romania may be affected or not by certain influence factors in direct correlation with different asset allocation strategies of pension funds. In this way, on literature review there are many studies which have analyzed the fluctuation of pension funds assets and a better reallocation of their investment in order to improve their efficiency. The experience of the value fluctuation of privately administered pension fund net assets is highly important, firstly because of its effects on the increase and the decrease of invested values for the insured persons' accounts, under the circumstances of constantly maintaining their contributions and, implicitly, the results achieved through these investments. The research methodology consists in testing of five variables: currency exchange rate, credit interest rate, bank deposit interest rate, reference interest rate and value of the stock exchange market index (BET-C index), by means of the multiple linear regression method. The conclusion is that only two of these factors, namely, the currency exchange rate and the reference interest rate, influence net asset value of privately managed pension funds, the second pillar, one in direct and the other in indirect correlation. In order to neutralize the effects generated by the diminution of the net asset value of privately managed pension funds, considering a short time horizon, we shall elaborate a dynamic mix of their investments able to adapt to the fluctuations of the influence factors. Thus, new opportunities will be generated in order to achieve the efficiency of pension funds and to prevent the diminution of the value of insured individuals' contributions to these pension funds.

Keywords: privately managed pensions, net assets, investments, factors of influence, statistical correlations

JEL Codes: G23, C15

1. Introduction

Internationally, there are systems of diversified pensions, which, in general, present a combination of the public and the private component. To the European Union level, there is no mutual system of pensions available for all Member States, but most of the Member States of the European Union have approached the multi-pillar pension system proposed by the World Bank. In Romania, the pension system is, as well, structured according the pattern proposed by the World Bank, thus: **-the public pension system**, which represents the **first pillar**, monitored by the National House of Public Pensions – CNPP; **-the private pension system**, under the observation of the Private Pension System Supervisory Commission – CSSPP, including its two components:

the **second pillar** – *privately managed compulsory component*, introduced in May 2008. According to the law, the designation of the pension fund includes the collocation *privately managed pension fund*; the **third pillar** – *privately managed optional component*, introduced in May 2007.

The compulsory component of private pensions, the second pillar, stirs up a series of discussions on international level, as, against the economic crisis background, certain States have no longer complied with the initial pension reform model, and we mention here countries in Central and Eastern Europe adopting certain adjustments of contributions to the pension second pillar.

Therefore, Hungary has adopted, at the end of 2010, a governmental plan for nationalization of compulsory private pension funds, the second pillar, meant to diminish the budgetary deficit. In 2009, Lithuania and Estonia have decreased the contributions to compulsory private pensions, from 5.5% to 3%, respectively, from 6% to 2%, and Latvia intends a decrease from 8% to 2%. In Slovakia, the second Pillar is no longer compulsory, and the contributions register a decrease of two thirds. In order to reduce the budgetary deficit, Poland has announced at the beginning of April 2011 the diminution of the level of contributions transferred towards the second Pillar from 7.3% to 2.3%. Romania, as well, has not succeeded in following the legal provision stipulating an annual growth of 0.5 percentage points for contributions to the second pillar. This growth was achieved only for 2009, for 2010, the contribution remained to 2.5%, and for 2011, it has increased to 3%.

The representatives of the European Commission claim that, as the States have assumed the implementation of a certain pension reform model, they should maintain the adopted system, regardless the economic context.

Considering these current issues of the system of compulsory private pensions, numerous studies and analyses were elaborated taking into account the efficiency of investments performed, their guarantee and regulation schemes and other aspects.

2. Theoretical Basis

The economic financial crisis manifested on international level has considerably reduced the asset value of pension funds, all over the world. A study undertaken in 2010, by Towers Watson (1), considering the evolution of pension fund assets on the greatest markets of pension funds in the world, has revealed the fact that the main issues disturbing their activity, as a result of the financial crisis, remain: “liquidity; the management of credit/collateral risk; asset manager underperformance; and new challenges in strategic allocation” (Watson, 2010).

The role of private pensions has great importance, particularly “...in countries that have introduced a mandatory private pillar as part of a systemic pension reform” (Tapia, 2008). For preventing “market failure” and the diversification of fund asset investments in order to reduce their risks, for most of the pension systems, on international level, diverse alternatives are established according to Pension Benefit Guarantee Schemes, as “A pension guarantee fund cannot work properly *without* adequate funding rules.” (Stewart, 2007)

In Romania, the system of privately administered pensions, for each component of private pension funds, namely, the second pillar of compulsory private pensions and the third pillar of optional private pensions, there is a pension scheme enforced by the law which provides a broad series of “risk control instruments: active dissociation, actuarial reserves, verification through depository, guarantee fund, audit, minimum rate of profitability.” (Zavoianu, 2010).

The best practices for the management of pension fund investments reveals the fact that a strategic mix of asset investments, adjustable in time, considering the situational influence factors, offers opportunities for achieving the best results. Therefore, various studies on international level, concerned with diversified ways of allocating pension fund assets show that, on the main markets, “pension funds continued to diversify into alternative assets” (Watson,

2009). As well, the economic crisis effects have determined a reallocation of pension fund asset investments from the member countries OECD towards low risk investments mainly internally oriented (Antolin and Stewart, 2009). Other countries have indicated that the appreciation of the currency exchange has determined an increase of the value of private pension fund assets (Watson, 2010).

Consequently, the insight of the value of pension fund assets becomes crucial as the diminution of their value influences, on one hand, their solvability and, on the other hand, the values accumulated in the accounts of insured individuals.

Considering numerous factors influencing private pension assets, as well as the unemployment rate, the evolution of the currency exchange rates and of the monetary policy interest rates (Mot, 2010), the present paper attempts at selecting few of them in order to determine how far they influence the net asset value of compulsory private pension funds, the second pillar.

3. Concepts and Methodology

In Romania, the system of privately administered pensions becomes a compulsory system for the individuals newly entered in the work market, below 35 years of age, and remains optional for the rest of the individuals aged under 45, who are already insured and contribute to the public pension system. The *administrators of privately administered pension funds* are represented by distinct companies, authorized by the supervisory body, the Private Pension System Supervisory Commission. The situation of authorized administrators of privately administered pension funds indicated 18 administrators at the initiation of the system (July 2007) and 14 at the end of the participant selection process (January 2008), presently, the system counts only 9 administrators (according to the last reports of CSSPP on January, 31st 2011). The *investments* deriving from the assets of these funds are controlled, monitored and undertaken according to the risk range specific to each fund, in an efficient and prudential manner. Except for one single pension fund administered by Generali, registering a high level of risk, the other 8 pension funds indicate an average level of risk.

In Romania, the main indices of privately administered pension funds, the second pillar, at the end of the year 2010, according to CSSPP reports, are as it follows (the indices are indicated by the Newsheet, CSSPP, 3rd year no 12/2010):

- the presence of 9 active pension funds, divided into two risk categories according to the investments performed: average risk funds (8 funds) and high risk funds (a single fund);
- the number of participants to privately administered pension funds is 5,186.37 thousand indicating an increase of 5.6% reported to the end of the year 2009 (December). From the total number of participants, 59% are aged under 35 (for this category, the adhesion is compulsory) and 41% are aged over 35 (for this group, the adhesion is optional). The coverage rate of number of participants in total employees of Romania reached 80% of the total number of employees (Newsheet, CSSPP, page 10);
- the involvement level related to the number of participants reached 67% for the first three privately administered pension funds, which belong to the following pension administrators: ING, Allianz-Țiriac și Generali, and 81% for the first five pension funds;
- the net assets estimated to 1,010.9 million euros (4,331.9 million lei) registered an increase of almost 82% as compared to December 2009 and of 4.3% compared to the previous month;
- from the total of net assets of privately administered funds, 86.3% have been invested on national level, and the rest of 13.7%, abroad.

The evolution of net assets of privately administered pension funds during the entire period of their collection, since their settlement to the present, is illustrated in Figure no. 1, Annex no. 1.

The investments of net assets of privately administered pension funds, in Romania, on investment categories agreed by the law, are presented in Figure no 2, Annex no. 1, from what it can observe

that, the investments of privately administered pension funds are mostly oriented towards *State bonds, shares and corporate bonds*, registering about 90% of their total.

We may notice a slightly gradual decrease of the active total value owned by bank deposits from the moment of the system settlement till present, namely, from 43.44% in June 2008, to 7.18% in December 2010.

Considering the structure of the privately administered pension fund investments, we will test the level to which **certain factors influence the evolution of the assets managed by privately administered pension funds, the second pillar**. Thus, we will mention certain factors of influence determining the evolution of privately administered pension fund assets:

-the level of interests, which may influence the transaction value of instruments with fixed income backward the evolution of interests. For the analysis, we consider the interest rates for credits and deposits, as well as the reference interest rate;

-the exchange rate, which influences the value of foreign currency denominated assets at the moment of their evaluation. Generally, a depreciation exchange rate of the national currency reported to the euro exchange rate determines a value increase of these assets;

-the stock market and its evolution influence, as well, the value of assets included by the pension funds. The value of investments in shares, for the second pillar, represented at the end of December 2010, 12.2% of the total of fund assets. The investments in shares rated on stock markets from the Member States of the European Union indicated 3.2% of the total of privately administered pension fund assets.

For the analysis, we use monthly data provided by the Private Pension System Supervisory Commission, the National Bank of Romania and Bucharest Stock Exchange, for the period May 2008 - December 2010 (the research is applied for a number of 32 monthly observations).

According to these factors of influence, the following variables have been applied for testing statistical correlations:

-the net asset of privately administered pension funds, as a dependent variable (its values during the studied period, May 2008 – December 2010, are outlined in Figure no 1, Annex no 1);

-the currency exchange lei/euro, the credit interest rate, the deposit interest rate, the reference interest rate and the value of the BET-C index, as independent variables (values which are pointed out in Figures no 3-7 from Annex no 1).

4. Results and discussions

The analysis of the correlation between the dependent variable and the five independent variables already identified may be achieved either separately, using the correlation coefficient, analyzing the correlations between the dependent variable and one independent variable selected among the group of studied variables, or globally, applying the linear regression.

Concerning the analysis of the correlation between the dependent variable, the value of the net asset of privately administered pension funds, the second pillar, and independent variables: the currency exchange lei/euro, the credit interest rate, the deposit interest rate, the reference interest rate and the value of the BET-C index, the Table no 1, Annex no 2, illustrates for each regression model the value of the correlation coefficient (R), the value of the determination report (R Square) and the standard error.

As we may notice in table no 1, Annex no 2, the first independent variable introduced in the model is “reference interest rate”, which exercises the greatest influence over the value of the net asset of the pension second pillar. The second stage introduces the second independent variable, namely “the currency exchange lei/euro”. The value of the correlation coefficient “R” is significant, which implies the presence of a very strong correlation according to the model.

Model no 1 presents the reliance between “net assets of privately administered pension funds” and the “reference interest rate”, achieving a correlation coefficient of 0.950 and a determination

report of 0.903, which suggests the existence of a correlation between the two variables, highly important due to the fact that 90.3% of the fluctuation of “net assets of privately administered pension funds” is determined by the modification of the “reference interest rate”.

Model no 2 introduces the second independent variable “the currency exchange lei/euro”, resulting a correlation coefficient of 0.978 and a determination report of 0.956. This implies the fact that 95.6% of the fluctuation of “net assets of privately administered pension funds” is explained by the fluctuation of the “reference interest rate”, respectively, of “the currency exchange lei/euro”. Moreover, by introducing the second independent variable into the regression model, the standard error of the estimate significantly decreases from 390.75 to 266.86.

According to table no 2, it becomes obvious that the other three independent variables studied, namely, the credit interest rate, the deposit interest rate and the BET-C index, are not considered in the model, because of their insignificant level of influence over the value of the net asset of privately administered pension funds.

The test t and the value Sig. serve for testing the regression coefficients, meaning the hypothesis according to which there is no significant correlation between the dependent variable and the independent variable. One may notice that, for the resulting model no 2, considered as the final alternative for the analysis, the significance threshold, Sig., takes higher values than those allowed, namely, the value of 0.05, which rejects the hypothesis according to which there is a significant correlation between analyzed variables, they being excluded from the model.

The regression coefficients calculated for each of the two models of the variables included here are illustrated in Table no 3, Annex no 2.

According to this study, the test t assumes high values for each variable, and the significance threshold, Sig., takes very low values (inferior to 0.05), which allows us to reject the hypothesis indicating a significant correlation between the analyzed variables, meaning slight errors determined by certain random measurements.

We observe that, the influence of the two selected variables over the net asset of privately administered pension funds, the second pillar, is optimum (Sig. <0.05), and the tolerance is higher than $1 - Adjusted R square$ ($1 - 0.953 = 0.047$) for each dependent variable which *eliminates the risk of non-collinearity*. VIF (Variance Inflation Factor = $1/Tolerance$) supports the collinearity analysis, being able to express a non-collinearity if it exceeds the value of 10.

In our case, for the two variables included in the model, the value of VIF is lower than 10, which confirms the lack of non-collinearity for these variables.

Considering the calculated coefficients expressed in the column B of the Table no 3, Annex no 2, the equation no 1 presents the linear model of multiple regression identified for the studied variable:

$$Y = 1659,258 - 619,85 \cdot X_1 + 1376,999 \cdot X_2 \quad (1)$$

where: Y – net asset of privately administered pension funds, the second pillar;

X_1 – reference interest rate;

X_2 – currency exchange lei/euro.

5. Conclusions

The present paper aims at providing an evaluation of the impact generated by certain factors of influence on the value of compulsory private pension fund assets, based on statistical methods and on a series of data on a gap of 32 months. This goal is achieved by means of the multiple linear regression equation which allows the estimate of the value of total net asset of privately administered pension funds according to two variables selected in the model.

The interpretation of the coefficients achieved from the equation (equation no 1) reveals that, according to data analyzed for the period of May 2008 – December 2010, on a short time horizon, the following correlations are manifested:

-if the value of the currency exchange lei/euro increases with one point, the value of the net asset increases with 1,376 million lei;
-if the reference interest rate increases with one percentage, the value of the total net asset decreases with 0.619 million lei.

The experience of the value fluctuation of privately administered pension fund net assets is highly important, firstly because of its effects on the increase and the decrease of invested values for the insured persons' accounts, under the circumstances of constantly maintaining their contributions and, implicitly, the results achieved through these investments.

Thus, the evolution of the currency exchange rate and of the monetary policy interest rate (reference interest rate) highly influences the assets of privately administered pension funds.

According to the achieved analysis, we should consider that, on a short time horizon, an increase of the reference interest rate will determine a slight decrease of the net asset of privately administered pension funds, an effect which has to be counter-balanced by a potential reallocation of pension funds towards investments providing better results. The analysis reveals the fact that, the evolution of the credit interest rate and of the deposit interest rate does not affect privately administered pension fund assets, while we have already pointed out, in a previous study, that it influences the optional pension fund assets, the third pillar. As well, the stock market index BET-C does not influence privately administered pension fund assets, although, shares register a significant value, of 12% of the total investments of privately administered pension fund assets.

Therefore, in order to counter-balance the effects determined by the diminution of the net asset value of privately administered pension funds, we should elaborate, on a short time horizon, a dynamic mix of their investments able to adapt to the fluctuations of their influence factors. Thus, new opportunities will be generated in order to achieve the efficiency of pension funds and to prevent the diminution of the value of insured individuals' contributions to these pension funds.

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Notes

(1)Markets submitted to the study: Great Britain, Switzerland, Holland, Germany, France, United States of America, Canada, Brazil, Australia, Hong Kong, South Africa, Ireland, Japan.

This paper represents a synthesis of a study which will be published entirely into a future publication.

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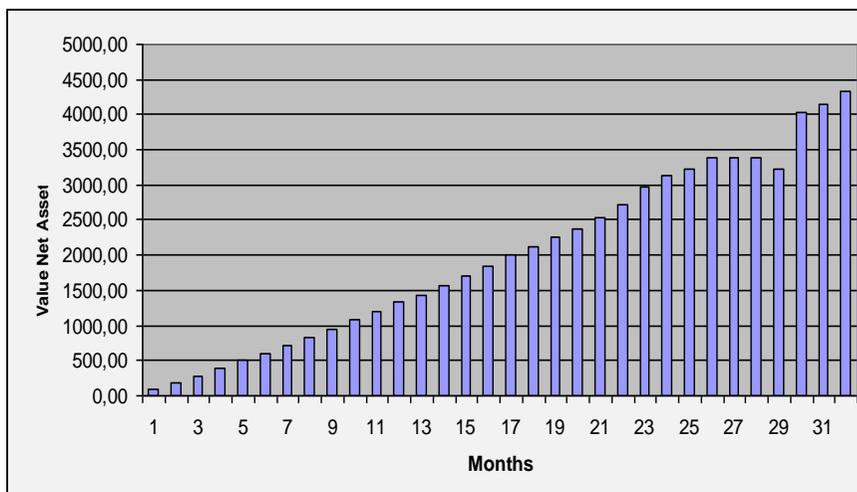


Figure no 1. Net assets evolution of privately administered pension funds in Romania, 2nd Pillar, during May 2008 - December 2010 (thousands RON)

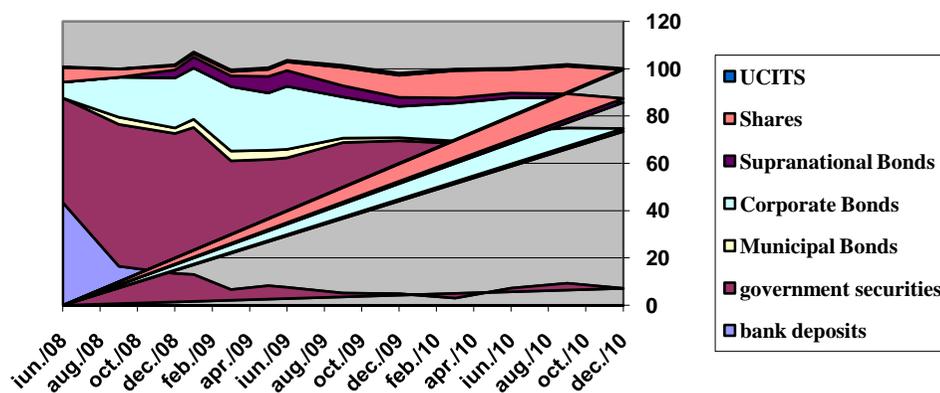


Figure no 2. Evolution of net assets of privately administered pension funds in Romania, the second pillar, for the period June 2008 – December 2010

Source: Data processed based on the data published on the website CSSPP, <http://www.csspp.ro/evolutie-indicatori/>, section statistics - data series

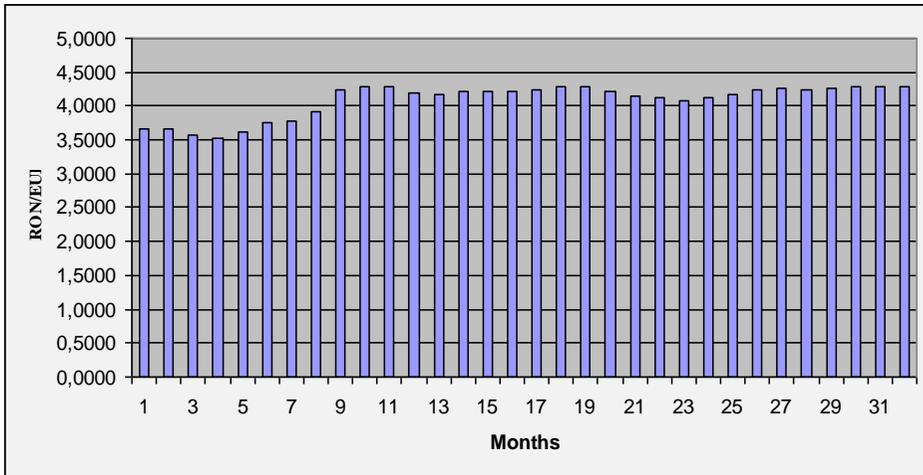


Figure no. 3. Evolution of currency exchange rate RON/Euro in Romania, during May 2008 - December 2010

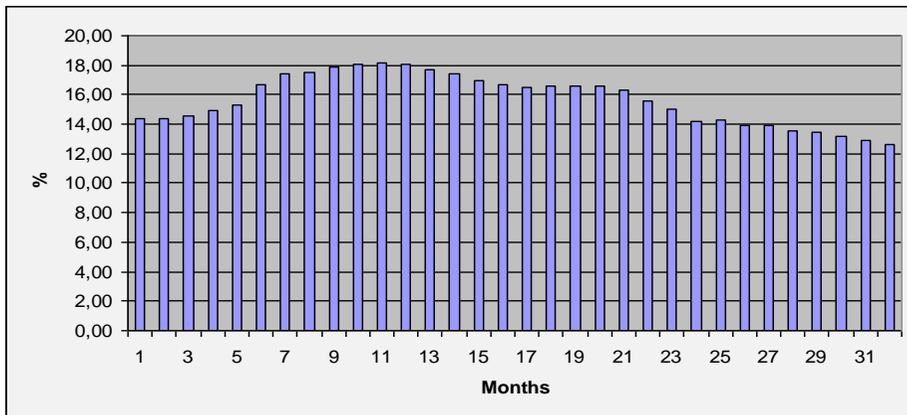


Figure no. 4. Evolution of credit interest rate in Romania, during May 2008 - December 2010 (%)

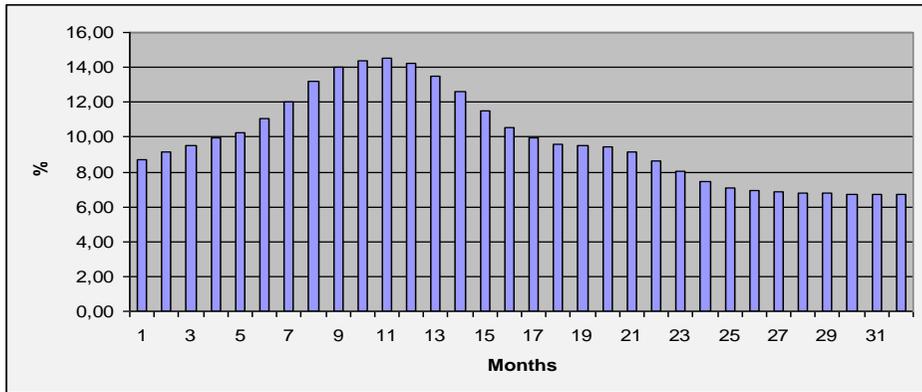


Figure no 5. Evolution of deposit interest rate in Romania, during May 2008 - December 2010 (%)

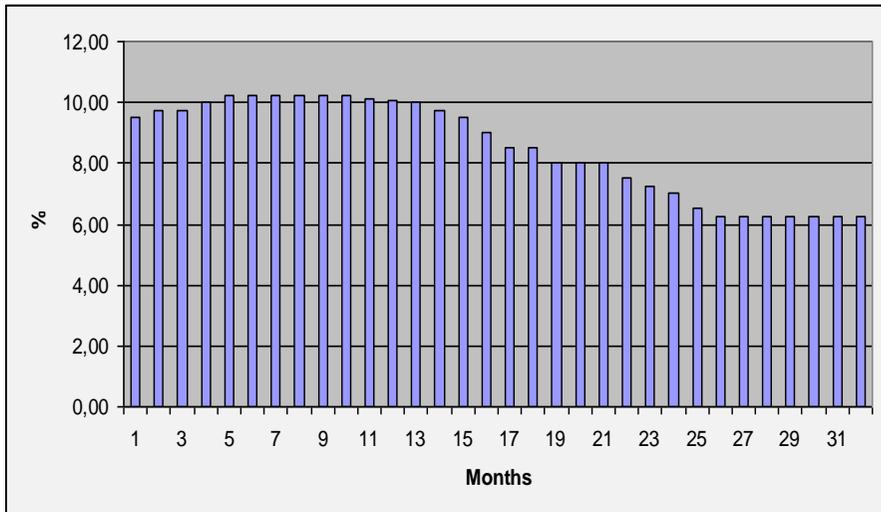


Figure no 6. Evolution of reference interest rate in Romania, during May 2008 - December 2010 (%)

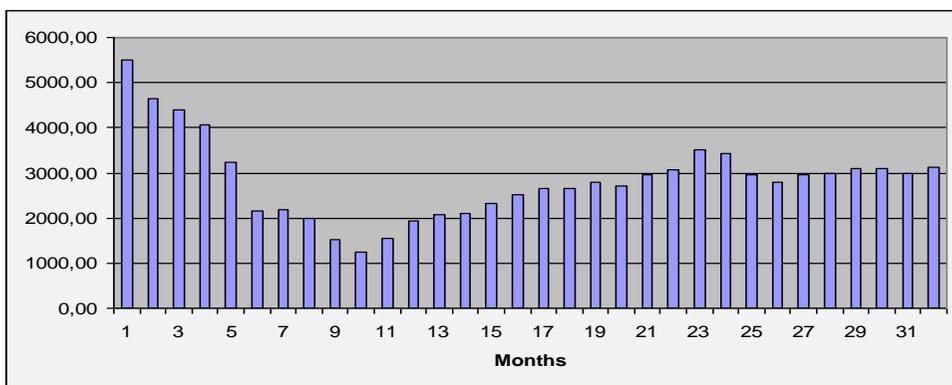


Figure no. 7. Evolution of BET-C index in Romania, during May 2008 - December 2010

Annex no 2

Model Summary

Table no 1

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.950 ^a	.903	.900	390.74947	.903	271.089	1	29	.000
2	.978 ^b	.956	.953	266.85732	.053	34.178	1	28	.000

a. Predictors: (Constant), Reference interest rate

b. Predictors: (Constant), Reference interest rate, Currency exchange rate lei/euro

c. Dependent Variable: Net assets of privately administered pension funds

Excluded Variables

Table no 2

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	Currency exchange rate lei/euro	.268 ^a	5.846	.000	.741	.739	1.354	.739
	Credit interest rate	.285 ^a	3.502	.002	.552	.363	2.756	.363
	Deposit interest rate	.491 ^a	5.420	.000	.716	.205	4.869	.205
	BET-C Index	-.239 ^a	-5.456	.000	-.718	.875	1.143	.875
2	Credit interest rate	-.091 ^b	-.784	.440	-.149	.118	8.473	.087
	Deposit interest rate	.185 ^b	.973	.339	.184	.043	23.175	.032
	BET-C Index	-.109 ^b	-1.465	.155	-.271	.269	3.712	.227

a. Predictors in the Model: (Constant), Reference interest rate

b. Predictors in the Model: (Constant), Reference interest rate, Currency exchange rate lei/euro

c. Dependent Variable: Net assets of privately administered pension funds

Regression coefficients for the dependent variable, net assets of privately administered pension funds

Table no 3

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	8193.433	379.023		21.617	.000		
Reference interest rate	-724.315	43.992	-.950	-16.465	.000	1.000	1.000
2 (Constant)	1659.258	1147.263		1.446	.159		
Reference interest rate	-619.850	34.956	-.813	-17.732	.000	.739	1.354
Currency exchange rate lei/euro	1376.999	235.538	.268	5.846	.000	.739	1.354

a. Dependent Variable: Net assets of privately administered pension funds

CENTRAL BANK INDEPENDENCE AND MACROECONOMIC PERFORMANCES – AN EMPIRICAL APPROACH

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The empirical evidence upon the macroeconomic performances of the independent central banks do not always have been successfully. In some cases, the consistency of the indices based on the interpretation of central banks statues used for measuring the degree of central bank independence is controversial, particularly for some of the indices. Moreover, the correlations between central bank independence and macroeconomic performance variables are not always confirmed, the causal relationship between central bank independence and inflation is controversial, and the higher disinflation costs, as a result of a higher sacrifice ratio correlated with the degree of independence is controversial, too. The effects of central bank independence upon macroeconomic performances focalized upon the empirical evidence of inflation, output or economic growth and the disinflation costs. This is due to the lack of studies vis – á – vis of relationship between central bank independence and macroeconomic performances regarding some variables like interest rates and budgetary deficits. Specialists consider inflation and output as the main determinants of the social welfare. The economic literature regarding this fact suggests that the central bank is seen as a free lunch institution. This hypothesis sustains that independent central banks will have social benefits in terms of lower inflation rates, but without any costs in terms of the real macroeconomic performances as a higher output volatility or a lower economic growth. In this article we provide a qualitative analyses regarding the relationship between central bank independence and macroeconomic performances. For this purpose the authors' used the new index for measuring central bank independence and inflation targeting based on three pillars: political and legal central bank independence, central bank governance and conduct of monetary policy, central bank transparency and accountability. For estimating the connections between the evolution of central bank independence and macroeconomic performances we used five macroeconomic variables: GDP in constant prices, Harmonised Price Consumer Index, unemployment rate, budgetary deficit and current account deficit. Both measuring the degree of central bank independence and evaluating the average levels of the macroeconomic variables were analysed in the period 1990 – 2009, within 20 less developing countries. The final results will help clarify the complex relationship between central bank independence and macroeconomic performances in countries who fostered a large amount of institutional shift in recent years.

Keywords central bank transparency, central bank accountability, inflation targeting, macroeconomic outcomes, free lunch hypothesis

JEL Classification E50, E52, E58

I. Introduction

In the past, most central banks around the world had functioned as departments of the Finance Ministers. These institutions were obliged by law, by custom or by both to dispose of the monetary policy instruments for attaining a large number of objectives, including high levels of economic growth and employment, to finance the public spending of the governments by getting

funds and solving problems related to the payment balance. Today, contrary to what happened twenty five years ago most central banks around the world gain high levels of legal and actual central bank independence. Central bank independence and institutional arrangement like inflation targeting have become largely accepted mechanisms by many specialists. In this sense, the prior responsibility of the central bank is attaining and maintaining price stability and financial stability.

The reasons behind this institutional shift in the structure of the central banks differ from country to country. In the European Union, some amendments brought to the central banks statutes imposed in order to accomplish legal convergence imposed by the Maastricht Treaty and the European System of Central Banks Statute. An example in this sense is the amendments brought to law no. 22 of December 1997 of the German central bank who raised the tenure of the Governing Board members from two to five years, abolishing government the veto right. Moreover, price stability has been established as the primary objective of monetary policy. Once European Central Bank was established, the monetary policy in the member countries is delegated to one supranational institution, with a high degree of legal independence from the national governments interests.

In this paper we focused upon the degree of central bank independence of twenty less developing countries and their institutional evolution since 1990 by testing a new index for measuring central bank independence and inflation targeting. Moreover, we analyze the compliance between the degree of central bank independence and five important macroeconomic variables: GDP, inflation, unemployment rate, budgetary deficit and current account deficit in these twenty less developing countries in the period 1990 – 2009.

II. Track recorded of the relationship between central bank independence and macroeconomic performances

One of the most important studies dealing with the relationship between central bank independence and macroeconomic performances suggests that monetary discipline associated with central bank independence reduces the level and variability of inflation but does not have either large benefits or costs in terms of macroeconomic performance. This observation represents at least a fragment of evidence in support of theories emphasizing the neutrality of money (Alesina and Summers 1993: 159).

Some other studies find a negative correlation between central bank independence and long-average inflation. They show a negative correlation between independence and long-run average government deficits as a percent of GDP. In general they find no evidence of a possible correlation between output growth and central bank independence (Pollard 2003: 34).

Better macroeconomic performance and more efficient policy are present in more credible and, to some extent, more transparent central banks. Independence and accountability, to the extent that we are able to measure them, do not seem to explain much of the cross-country variation in macroeconomic outcomes, either individually or in conjunction with other variables (Cecchetti and Krause 2002: 56).

To examine the links between central bank independence and economic performance it is necessary to devise appropriate criteria for measuring central bank independence. In the industrialized countries, measures of central bank independence are based mainly on the interpretation of central bank laws and therefore concern legal independence only. The construction of so-called legal indices is done by structuring those criteria regarded as relevant and assigning them a value on the same numerical scale of independence (Healey and Harrison 2004: 109; Touffut 2008: 9; Laurens, Arnone, Segalotto 2009: 24).

The correlation between central bank independence and inflation rate in the developed and emerging countries is a positive one; this fact can be justified by the Philips curve, in which

governments prefer a decrease in the unemployment rate and an increase in wages, and consequently an automatic increase in the inflation rate (Dumiter 2010a: 185).

Summarizing, the most important fact is that the different indices used by one or another author distorted the accuracy of the empirical results because of the gap between *de jure* and *de facto* independence. In this study, we want to eliminate those problems by analyzing central bank independence and macroeconomic performances through the new index for central bank independence and inflation targeting.

III. Estimating the connections and correlations between central bank independence and macroeconomic performance in less developing countries

In order to evaluate and assess the impact of central bank independence regarding the macroeconomic performances we have considered appropriate to use a new index. The new index for central bank independence and inflation targeting (ICBIIT) has three main pillars: political and legal central bank independence (PLBCI), central bank governance and conduct of monetary policy (CBGCM), central bank transparency and accountability (CBTA) (Dumiter 2009a: 39-42). The new index for central bank independence and inflation targeting is constructed as a sum of thirty eight institutional arrangements both in law and practice of the central banks: nine attributed to political and legal central bank independence, regarding variables like turnover rate of central bank Governor and political vulnerability, tenures of central bank Governor and the members of the Governing Board, the appointment and dismissal procedures of the Governor and the members of the governing board; fifteen attributed to central bank governance and conduct of monetary policy regarding aspects as: price stability, the central bank pre-eminence over government in case of policy conflicts, the authority in managing the exchange and interest rates, granting direct and indirect credit to the government, the degree of central bank independence in setting the monetary policy objectives, targets and instruments; fourteen attributed to central bank transparency and accountability: disclosing time series for the main economic variables and the macroeconomic models used for policy analyses, communicating with the public and the media, announcing the current and future paths of monetary policy, auditing central bank activities.

The index is better called as a *de facto* or actual index rather than a *de jure* one, because the aggregated value is based on the actual institutional practices or norms of the central banks and not necessarily what is written in the central bank laws (Dumiter 2009b: 87). However, the new index for central bank independence and inflation targeting is an interpretation based on these laws, which are put into actual practice and those practices that are not stipulated by law.

In order to evaluate the soundness of the index for measuring central bank independence and inflation targeting (ICBIIT) it is very important to measure this index in the less developing countries. For this purpose we have considered for our study a less developing group formed by twenty countries: Argentina, Botswana, Brazil, Chile, Ghana, Jamaica, Jordan, Malaysia, Mexico, Namibia, Nepal, Philippines, Rwanda, Saudi Arabia, South Africa, Sri Lanka, Tanzania, Thailand, Trinidad Tobago, Zambia, in order to evaluate the degree of central bank independence and its evolution in countries with many institutional shifts. The measure was made by analyzing central banks laws and statutes, norms, regulations, publications, studies and other important material regarding institutional matters and actual practices of the central banks according to their websites in the period 1990 – 2009.

Given the lack of studies dealing with the relationship between central bank independence and macroeconomic performances in the less developing countries we have been focusing upon this country group. Measuring central bank independence was made by using the index for central bank independence and inflation targeting (Dumiter 2010b: 102-106). The analyses was made by comparing the levels of central bank independence and the average of five macroeconomic

variables in the period 1990 – 2009, as: GDP in constant prices, Harmonized Price Consumer Index (HPCI), unemployment rate (UR), budgetary deficit as a percent of GDP (BG) and current account deficit as a percent of GDP(CAD); they were extracted of the International Monetary Fund website, *World Economic Outlook Database*.

IV. Results of measuring central bank independence and their correlation with the macroeconomic performances in less developing countries

Measuring central bank independence according to the index of central bank independence and inflation targeting in the less developing country group (Fig. no. 1) has emerged with the following results: regarding the first pillar, central bank political and legal independence only a few countries: Mexico, Philippines and Tanzania exhibit higher levels, whereas the rest of the countries have lower scores; this is due to the government active participation in the appointment and dismissal procedures of the Governor and the members of the Board, the political vulnerability and the higher turnover rate of the central bank Governor. Moreover, the tenures of the central bank Governor and the members of the Board are beneath the length of the political cycle.

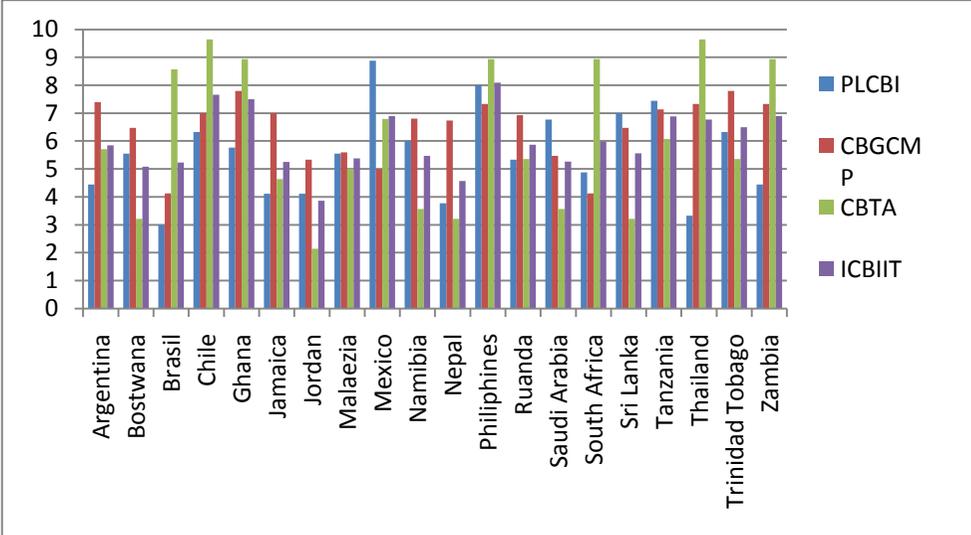


Fig. no. 1 Measuring central bank independence according to the Index for central bank independence and inflation targeting in twenty less developing countries
Source: realized by authors'

The second pillar of the index, central bank governance and conduct of monetary policy, measured in the less developing country group reveals in the majority of the countries medium to low scores due to some factors as: government prevaillace over the central bank in case of policy conflicts, multiple objectives of monetary policy without any prioritisation of one or another, financing government deficits in direct and indirect manners, government interference in establishing and managing the interest rate and exchange rate, government active implication in establishing and applying monetary policy objectives, targets and instruments.

With the exception of Chile, country that has adopted the inflation targeting as monetary policy strategy, countries in the less developing country group attain lower levels of central bank transparency and accountability pillar, due to some factors as: an unclear process of communicating and debating with the public and media regarding the monetary policy stance,

lack of time series for the main economic variables and the macroeconomic models used for policy analyses, lack of forecasts regarding inflation and output paths, lack of transparency in modifying the path and course of present and future monetary policy.

Regarding the correlation between the degree of central bank independence and macroeconomic performances in the less developing country group, the results are the following (Fig. no. 2): between central bank independence, using the index for central bank independence and inflation targeting and GDP countries as: Chile, Phillippines, Ghana and Zambia foster medium levels of central bank independence associated with good track record in terms of economic growth, while the rest of the countries gathered in this group exhibit lower levels of central bank independence and satisfactory levels of GDP.

Central bank independence and average inflation in the less developing country group are inverse correlated in countries as: Argentina, Brasil and Zambia, countries who foster lower levels of central bank independence and higher average inflation rates. Other countries as: Phillippines, Ghana, Thailand register acceptable levels of central bank independence and lower levels of inflation, while the rest of the countries exhibit lower levels both of central bank independence and inflation rates.

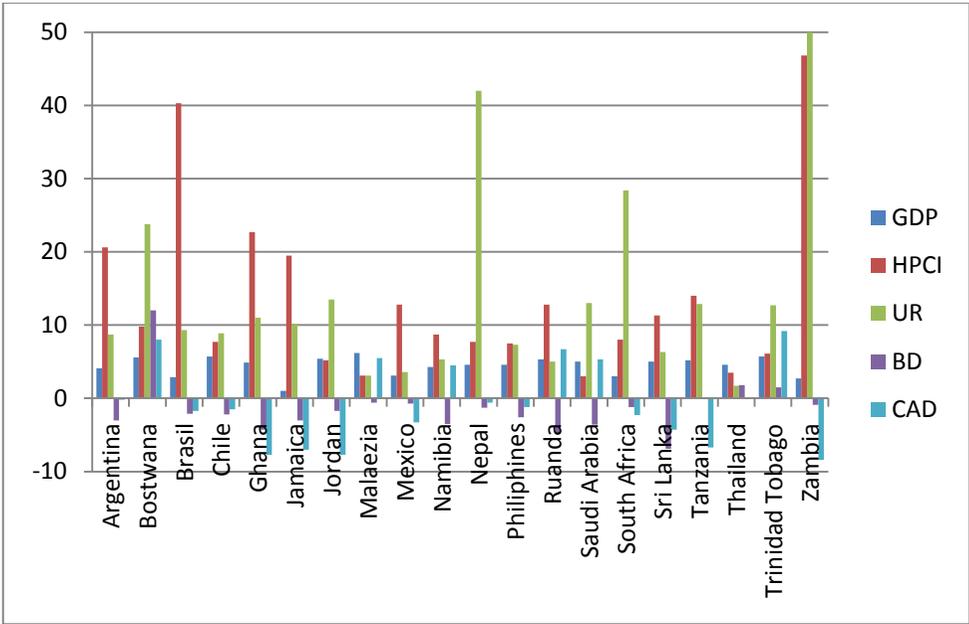


Fig. no. 2 Central banks’ macroeconomic performances average in twenty less developing countries between 1990 – 2009
Source: realized by authors’

For the relationship between central bank independence and average unemployment rate in the less developing country group, South Africa, Saudi Arabia, Bostwana, Jordan, Jamaica, Nepal, Tanzania, Trinidad Tobago and Zambia, countries who gain lower levels of central bank independence and higher average levels of the unemployment rate. At the opposite side we can remark Argentina, Brasil, Chile, Malaezia, Mexico, Namibia, Ruanda, Sri Lanka and Thailand, countries characterized by lower levels of central bank independence and of the unemployment rate.

The relationship between central bank independence and bugdetary deficit in less developing countries is split in two parts: in the first one, countries as Trinidad Tobago, Thailand, Bostwana

exhibit medium levels of central bank independence and positive budgetary deficits, while for the rest of the countries we can identify an inverse relationship between central bank independence and budgetary deficits.

Finally, the correlation of central bank independence with the current account deficit is a positive one in countries as: Saudi Arabia, Botswana, Malaysia, Namibia, Rwanda and Trinidad Tobago, while for the rest of the countries of the less developed group we can identify an inverse correlation between central bank independence and current account balance.

V. Conclusions

The vast empirical studies dealing with the relationship between central bank independence and macroeconomic performance identify a problem around the construction of the indices regarding measuring central bank independence. This situation leads to an inadequate measure of the degree of central bank independence in developed and developing countries, results which distort the connections with the macroeconomic performances.

In this article we have used the new index for measuring central bank independence and inflation targeting in order to eliminate the differences between *de jure* and *de facto* independence to a more accurate perception of central bank independence. Moreover, we focused upon several macroeconomic indicators as the average over a twenty years time horizon. The sample that we have constructed consists in twenty less developed countries that have evolved in recent years both economically and socially.

The result of our analyses suggests that central bank independence is positively correlated with the economic growth in the vast majority of countries, meaning that an increase in the degree of independence will improve the economic growth. Regarding the inflation and employment performances and the degree of central bank independence the results are very interesting: some countries with relatively independent central banks exhibit higher levels of inflation and employment, meanwhile other countries with politically dependent central banks gather lower levels of inflation and employment. This means that in less developed countries central bank independence is not an important factor to explain the inflationary trends and the unemployment rate movements.

Finally, the relationship between both current account balance and budgetary deficits are emerging: in some countries there is a positive relationship between central bank independence and budgetary deficit and current account balance, meanwhile in other countries we can identify an inverse relationship between these two variables.

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COMPETITION IN THE BANKING SYSTEM OF REPUBLIC OF MOLDOVA

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The banking system is one of the financial market segments which plays an important role in the financial circuit both at the country level and as a component of the international financial system. Developing a competitive banking system allows to avoid monopoly situations creating the possibility for each bank to be oriented to a certain range of services and products provided willing to increase continuously their quality and attractiveness. The dynamic analysis of effective competition in the domestic banking system would allow determination of factors with negative influence on the rate of participation of each bank in the total bank portfolio items, and also the possibility of reviewing the financial policies pursued in the banking sector. Study of bank system competition is a topic of interest both for financial analysts, and for authorities, given the opportunities arising: qualitative assessment of competition in the banking sector, verifying in which way the regulations in force have influenced the dynamics of competition, measuring the intensity of competition in the banking sector, detection, based on statistical analysis of competitive situation, of the main qualitative types (categories) of financial institutions active in the financial market. Moldova's banking system, according to the results obtained by analyzing the competition, has a moderate competition, even if it is obvious its increasing trend. Banking policies, trends in international financial markets, internationalization of capital markets affect the position of the banking system on domestic financial market, implicitly calculating the contribution of each bank in the formation of the portfolio: bank assets, total regulatory capital, the volume of loans and deposits.

Keywords: banking system, competition, Gini coefficient, Herfindahl–Hirschman, Lorentz distribution.

Study of bank system competition is a topic of interest both for financial analysts, and for monetary authorities. Main concerns regarded qualitative assessment of financial-banking sector competition, verifying the degree in which way the regulations in force have influenced the dynamics of competition, measuring the intensity of competition in the banking sector and qualitative appreciation of competitions' dynamics, detection, based on statistical analysis of competitive situation, of the main qualitative types (categories) of financial institutions etc. It is important for Republic of Moldova to know how did the banking system evolve, in time, what measures and actions were taken and what other measures are necessary to be implemented. Or, it is absolutely necessary to know, pertinently and reliably, main force relations of the financial-banking actors of the market and their evolution in time. The article presents the results of some instruments and mathematical-statistical methods used in worldwide theory and practice for qualitative appreciation of the level and dynamics (changes) of competition in the banking sector of Republic of Moldova.

Statistical data used in this article include the years 1999-2010, on portfolio elements, mentioning the following categories: total assets of the commercial bank, normative capital, amount of credits and deposits for 15 banks that activate (as an exception, in 2008 the number of commercial banks equaled to 16).

The methodology of analysis and appreciation is as plentiful and various, as well as complex. The theory proposes a wide range of procedures and graphical and numeric instruments to

measure the level and dynamics of competition, and for interpretation of the obtained results. Among them, the mostly used, worldwide, are those from the domain of study and analysis of units' concentration in a statistical collectivity, in our case, statistical collectivity being the banking system, and the units – commercial banks.

The analysis of concentration in the banking system regards the assessment of the concentration degree of diverse elements from a commercial bank portfolio (assets, deposits, credits, ATMs, released cards, clients, etc.) and, on this base, of the level of competition and the main force ratios between commercial banks in Republic of Moldova.

Also, the assessment of concentration is used for market structure reference (credit market, deposit market, etc.). In this case, the concentration study might be supplemented with diversification assessment.

Concentration study is applicable just for positive value variables; with values that are susceptible to addition (addition of values makes economic sense!).

Statistical characterization of concentration can be achieved by two categories of procedures: numeric procedures (computation) and graphical procedures.

Assessment of the concentration degree through numeric procedures consists of computing some concentration indicators, such as the coefficients of the concentration degree:

- Gini concentration indicator
- Herfindahl–Hirschman indicator

Assessment of the concentration through graphical way consists in putting up the concentration curve — Lorentz–Gini curve.

The concentration curve

The graphical procedure for concentration reference was belabored by Corrado Gini (Italy) and Lorentz (USA) for the study of income disparity. In our days, this procedure has numerous applications, inclusively in illustration and concentration assessment of sundries portfolio elements in the banking sector.

Graphical determination of concentration assumes putting up the concentration curve, also named Lorentz–Gini curve. For competition analysis in the banking system, the Lorentz curve is applied for graphical representation of percentage distribution of a variable (portfolio elements: assets, normative capital, credits, deposits etc.) in every commercial bank of a banking system. Generally, the curve is represented as cumulated values of the variable (on the ordinate), in percentage, as a function of relative effectives (in percentage) cumulated of commercial banks (on the abscissa).

The concentration curve is a graphical representation of q variable as a function of p variable. The values of the two variables are defined by the relations:

$$p_i = \frac{n_i}{N}, i = 1 \dots N, n_0 = 0, n_i = n_{i-1} + 1 \quad (1)$$

$$q_i = \frac{x_i}{\sum_{j=1}^i x_j}, i = 1 \dots N, L_0 = 0, L_i = L_{i-1} + x_j \quad (2)$$

The values of p_i and q_i variables vary between 0 and 1. If the values of characteristics is totally and equally distributed, the Gini indicator equals to zero, expressing a perfect equality in the banking system, namely every commercial bank has the same level of the characteristic (which states for a high competition level between commercial banks). If the indicator is equal to 1, the situation states for maximum inequality, because just one bank has entirely the studied characteristic (a situation with minimum competition and monopoly of a bank). The more the concentration curve is closer to the diagonal, the stronger the concentration is.

Numeric procedures for concentration assessment

From the category of numeric procedures, the following two will be treated: Gini concentration indicator and Herfindahl–Hirschman indicator.

Gini concentration indicator - i_G - is a concentration synthetic indicator of distributions, defined as a ratio between two surfaces: concentration surface S_c and half of square surface (Gini), as given below:

$$i_G = \frac{\text{Concentration_Surface}}{\frac{\text{Square_Surface}}{2}} \quad (3)$$

Because the surface of the square equals to 1, the concentration indicator i_G is twice the surface between the concentration curve and the first diagonal of Gini square, which is the double of the concentration surface:

$$i_G = 2 \times S_c \quad (4)$$

The value of the concentration indicator is always between 0 and 1, respectively between 0 and 100%, reflecting the variation from the null concentration to a maximum concentration.

Herfindahl–Hirschman indicator

Herfindahl–Hirschman indicator expresses the concentration degree of a market (e.g. credits market, deposits market etc.) taking into account the dispersion (distribution inequalities) existing between the biggest commercial banks. It's being defined as the sum of squares of market shares held by commercial banks.

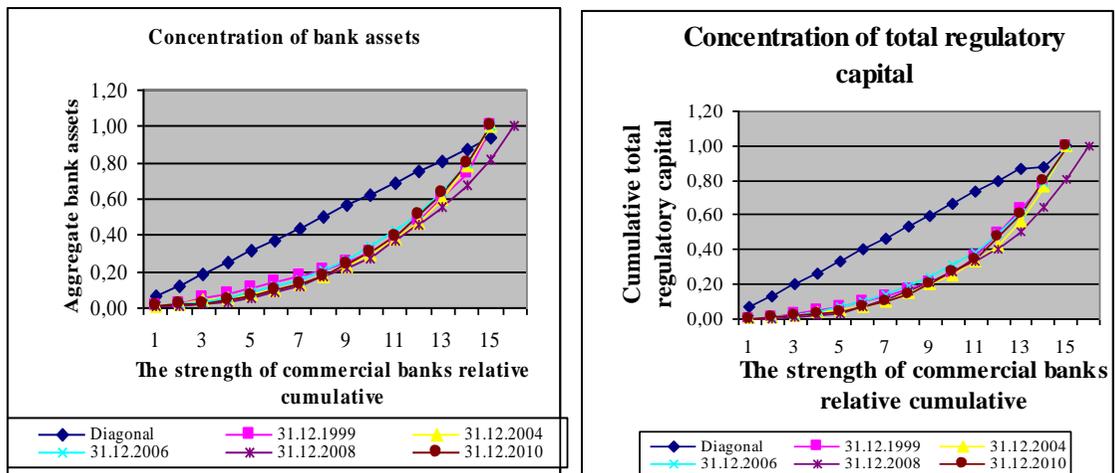
$$H = \sum_{i=1}^N (s_i)^2 \quad (5)$$

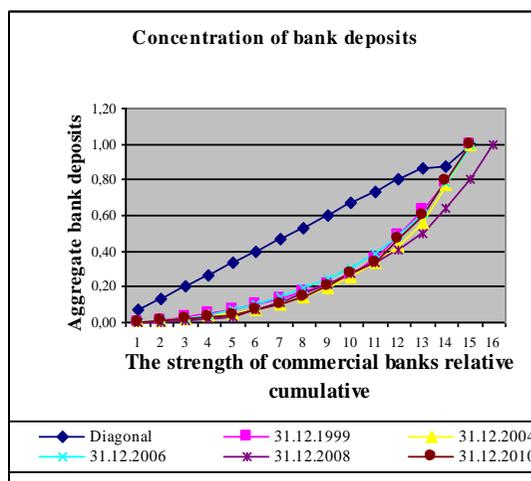
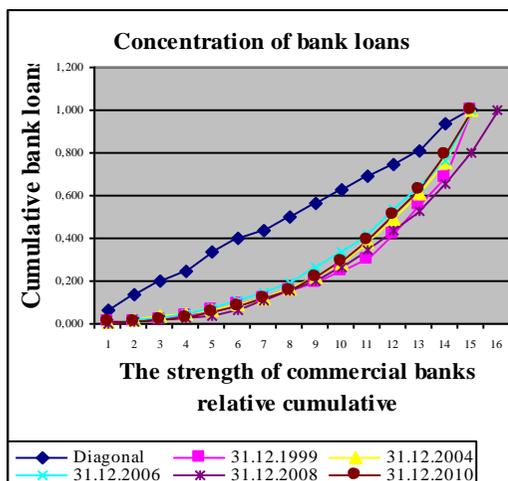
- where s_i represents market shares of all commercial banks.

The market shares are expressed in percent. The value of Herfindahl–Hirschman indicator varies between 0 and 10000. The bigger the value of Herfindahl–Hirschman indicator is, the more concentrated the market is. In case of monopoly (maximum concentration), the indicator is equal to 10000, but in case of a competition market, with an infinite number of participants (the perfect situation), the indicator approximates to zero.

The graphics of concentration curves, on portfolio elements, are presented below.

Figure nr. 1





Source: executed by the authors

The main concentrations of portfolio elements' indicators are presented in the table below:
Concentrations of portfolio elements' indicators for RM banking system
in 1999 - 2010

	Total Assets		Total normative capital		Credits		Deposits	
	Gini Indicator	Herfindahl-Hirschman Indicator	Gini Indicator	Herfindahl-Hirschman Indicator	Gini Indicator	Herfindahl-Hirschman Indicator	Gini Indicator	Herfindahl-Hirschman Indicator
1999	0,429	2420,709	0,546	2644,740	0,499	2938,849	0,471	1731,848
2000	0,389	2090,808	0,507	2509,308	0,458	2806,662	0,450	2111,654
2004	0,454	1950,131	0,316	2542,820	0,444	2212,030	0,509	2024,688
2005	0,484	1937,654	0,316	2542,820	0,425	2455,837	0,495	2069,307
2006	0,444	1810,695	0,322	2219,239	0,457	1945,635	0,480	1878,579
2007	0,438	1805,08	0,361	1688,08	0,463	1890,59	0,473	1923,01
2008	0,453	1522,44	0,392	1576,83	0,483	1611,06	0,489	1653,06
2009	0,469	1592,89	0,389	1676,98	0,470	1531,44	0,502	1703,62
2010	0,468	1741,29	0,393	1898,53	0,482	1774,10	0,507	1824,56

Source: executed by the authors

Analyzing the presented graphics, as well as the numeric values of concentration indicators (Gini and Herfindahl–Hirschman), authors conclude that:

The concentration of all portfolio elements analyzed is stressed (the Gini indicator is between 0.316 and 0.546). For the analyzed period (years 1999 to 2010), the competition between commercial banks intensified (decrease of the concentration degree of portfolio elements and of diverse financial market segments). The competition in the banking system is determined, inclusively, by foreign banks' penetration in the inland market, connection of activity standards to international standards, extension of proposed services and performed operations.

Concentration curves' graphics have underlined the main qualitative types of commercial banks, traced by the individual concentration degree of portfolio elements, by the position on the market and by the main relations between commercial banks from Republic of Moldova. Based on the results of the statistical analysis, there were defined three main categories of commercial banks:

- 1ST TYPE — *Moldova-Agroindbank*, which is detaching from the other commercial banks of Republic of Moldova's banking system, due to important market shares (app. 20% out of every portfolio element)

- 2ND TYPE — *Four big commercial banks*: Victoriabank, Banca de Economii, Moldindconbank and Eximbank.

- 3RD TYPE — *Next ten commercial banks*.

In numeric expression, the main relations between commercial banks (stressed out by concentration curves), are presented as follows:

- first 10 commercial banks (3rd type) hold approximately 30% of total bank assets, the rest of 70% is hold by the five big commercial banks (1st and 2nd type)

- first 10 commercial banks (3rd type) hold approximately 37% of total normative capital, the rest of 63% is hold by the five big commercial banks (1st and 2nd type)

- first 10 commercial banks (3rd type) hold approximately 40% of total bank deposits, the rest of 60% is hold by the five big commercial banks (1st and 2nd type)

- first 10 commercial banks (3rd type) hold approximately 29% of total bank credits, the rest of 71% is hold by the five big commercial banks (1st and 2nd type)

- 1ST TYPE *Moldova-Agroindbank*, at the end of 2010, for the first time in the analyzed period, conceded the position of market leader on attracted deposits, for Victoriabank, registering a drop of 0,8 p.p.

It was observed that the group of ten 3rd type banks, in analyzed period, had increased their contribution to every portfolio element, in average with 2-4%, the market share of 1st and 2nd type banks being decline.

In the 2nd type group of banks, repeated reshufflings have been registered, determined by evolution trends of national banking segment, as well as by financial market in general, Mobiasbancă and Banca Socială conceded their positions.

In respect to Republic of Moldova, combined analyses are preferred, both in real terms, and in nominals.

Although the analysis of indicators' dynamics (Gini, Herfindahl-Hirschman), stress out the tendency of competition intensification in the national bank system, however, the analyzed portfolio elements are concentrated by three banks: *Moldova-Agroindbank*, *Victoriabank* and *Banca de Economii* in direct ratio of 50%. Financial crisis from 2007-2008 had reduced the concentration movement of the portfolio elements, increasing the market share of banks with a significant weight on the market, simultaneously, decreasing the influence of small banks.

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EXCHANGE-RATES FORECASTING: EXPONENTIAL SMOOTHING TECHNIQUES AND ARIMA MODELS

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Exchange rates forecasting is, and has been a challenging task in finance. Statistical and econometrical models are widely used in analysis and forecasting of foreign exchange rates. This paper investigates the behavior of daily exchange rates of the Romanian Leu against the Euro, United States Dollar, British Pound, Japanese Yen, Chinese Renminbi and the Russian Ruble. Smoothing techniques are generated and compared with each other. These models include the Simple Exponential Smoothing technique, as the Double Exponential Smoothing technique, the Simple Holt-Winters, the Additive Holt-Winters, namely the Autoregressive Integrated Moving Average model.

Keywords: Forecasting, Simple Exponential Smoothing, Double Exponential Smoothing, Holt-Winters Additive, Holt-Winters Multiplicative.

JEL clasification: G17, F31, F47.

I. Introduction

The exchange rate reflects the ratio at which one currency can be exchanged with another currency, namely the ratio of currency prices. The relevant literature implies, by the purchasing power parity theory, that in the long-run exchange rates converge to an equilibrium level. The question that arises is related to the behavior in the short-term of the exchange rates, and how these fluctuations might affect the financial market players, the investors as well as those directly influenced by changes in the exchange rate. To forecast exchange rates there are numerous models, which are more or less complicated for modeling the relationship between currencies, but those interested do not always have the resources needed to fully benefit from them, or as suggested by the literature, most of exchange rate models based on macro economic data are considered outperformed. So prediction methods based on the random walk models and exponential smoothing techniques can be used in capturing the fluctuations the short-run. The main goal of this study is to present the performance of methods for the task of exchange rate forecasting, using the exchange rates of Romanian Leu versus the most important currencies in terms of international trade, namely the Euro, United States Dollar, British Pound, Japanese Yen, Chinese Renminbi and the Russian Ruble.

II. Literature Review

The efficiency of exchange rate predictability by models based on past information in time series is the main question raised. The relevant literature on currency forecasting issues includes a wide range of methods. (Meese and Rogof: 1983) have shown that models that are based on the random walk hypothesis in forecasting exchange rates outperform those based on macroeconomic indicators. But when the time horizon is extended past 12 months, the same

authors, together with (Chinn and Meese: 1995), respectively (Mark: 1995) argue that this efficiency is lost. (Mark: 1995) investigates the movements of the U.S Dollar against four major currencies in a time period of 18 years, his findings indicating that exchange-rate models based on macroeconomic fundamentals have a higher forecast ability than those based on random walk. (Chinn and Meese: 1995) using non-parametric and parametric models examine the predictive performance of both types of models, using the exchange rate of U.S Dollar against four currencies, over a time horizon of 17 years. They reach to the conclusion that random walk models outperform the models based on fundamentals, but only in the short-term, when it comes to larger periods of time, more than 36 months, this superiority is lost. (Marsh and Power: 1996) use 22 forecasters to predict movements in three major currencies against the U.S. Dollar, including the random walk estimators. (Andreou, Georgpoulus and Likothanassis: 2002) employ neural networks to predict four currency movements against the Greek Drachma, using information about macroeconomic factors from the point of view of the market participants, concluding that the greatest impact have those information which correspond to the trend of the time series. (Goldberg and Frydman: 1996), testing a time period over 15-years the exchange rate of the U.S. Dollar against German Mark, found that all structural exchange rate models are outperformed by the random walk model. They consider that the failure of empirical exchange rate models is largely due to periodic shifts in the long-run relationship governing the exchange rate and macroeconomic fundamentals, due to an instable monetary-policy, which in turn produces shifts in the cointegrating vector. However (Hwang: 2001) finds long-term cointegrating relationships between exchange rate and macroeconomic factors in some of the analyzed series, but in the short-term two random walk models are found to exceed the traditional models. (Kilian and Taylor: 2001) try to combine the models based on macroeconomic indicators with those on random walk, considering that in the long-run these models are optimal. It is apparent that in the related literature both types of models are used, but the ones using macroeconomic indicators are efficient in the long-run, while predictability in the short-term is ensured by models based on random walk.

III. Methodology

A. Single Exponential Smoothing Technique (MNES)

To forecast the exchange rates in the first step the single exponential smoothing procedure is applied, this model assuming that the series is stationary, without a trend. Simple exponential smoothing is used for short-range forecasting, usually just one month into the future. The relationship which characterizes the the single exponential smoothing procedure is:

$$Y_n = a + \varepsilon_n \quad (1)$$

Where a represents the constant, while ε_n stands for the residuals. To forecast the $n+1$ moment in the moment n , the following series is computed recursively :

$$\hat{Y}_{n+1} = \alpha \cdot Y_n + (1-\alpha) \cdot \hat{Y}_n, \text{ where } n = \overline{1, t+k}; \quad (2)$$

The number of available observations is shown by t , where k stands for the time horizon for which forecasts is made. α is the smoothing factor, which can take values between 0 and 1, a close value to 0 means that the expected values for $n+1$ are equal to the prior forecast, and a value close to 1 suggests that the forecasts are equal to the previous observation. The value of α is usually determined by minimizing the sum of squares of the forecast errors:

$$\frac{1}{n} \sum_{i=0}^{n-1} (y_{n+1} - \hat{Y}_{n+1})^2 = \frac{1}{n} \sum_{i=0}^{n-1} e_{n+1}^2 \quad (3)$$

The (2) relationship is applied recursively for each observation from the series, each new smoothed value \hat{Y}_{n+1} is computed as the weighted average of the current observation, Y_n and the previous smoothed observation, \hat{Y}_n . Thus each smoothed value \hat{Y}_{n+1} is the weighted average of the previous a n observations, the weights of these decrease exponentially in the past, so Y_1 has a weight of $\alpha \cdot (1-\alpha)^{n-1}$, Y_2 a weight of $\alpha \cdot (1-\alpha)^{n-2}$, Y_{n-1} being weighted with $\alpha \cdot (1-\alpha)$. So equation (2) can be written as:

$$\hat{Y}_{n+1} = \alpha \cdot \sum_{i=1}^n (1-\alpha)^i \cdot \hat{Y}_{n+1-i} \quad (4)$$

The initial value of \hat{Y}_1 is usually equal to Y_1 , or with the average of the initial values of the series.

B. Double Exponential Smoothing Technique (MNED)

This method applies two equations recursively for the Y_n , namely:

$$S_n = \alpha \cdot Y_n + (1-\alpha) \cdot S_{n-1} \quad (5)$$

$$D_n = \alpha \cdot S_n + (1-\alpha) \cdot D_{n-1} \quad (6)$$

where S_n is the single smoothed series and D_n is the double smoothed series. α stands for the smoothing parameter, between $0 < \alpha \leq 1$. This method is appropriate for series with a linear trend, the forecasts from double smoothing are computed as:

$$\hat{Y}_{n+h} = \left(2 + \frac{\alpha \cdot k}{1-\alpha}\right) \cdot S_n - \left(1 + \frac{\alpha \cdot k}{1-\alpha}\right) \cdot D_n = \left(2S_n - D_n + \frac{\alpha}{1-\alpha} \cdot (S_n - D_n) \cdot k\right) \quad (7)$$

Expression (7) can be interpreted as an equation with intercept $2S_n - D_n$ and slope $\frac{\alpha}{1-\alpha} \cdot (S_n - D_n)$. The initial values for S_1 , respectively D_1 are usually set to be equal with Y_1 , or with the average of the initial values of the series.

C. Holt –Winters Simple Exponential Smoothing Technique (MHWES)

This method is appropriate for series with a linear trend and no seasonal variations. This technique is using two recursions, the forecasted series being:

$$Y_{n+k} = a + b \cdot k \quad (8)$$

Where a is the intercept, while b, stands for the slope, which are computed recursively:

$$a_n = \alpha \cdot Y_n + (1-\alpha) \cdot (a_{n-1} + b_{n-1}) \quad (9)$$

$$b_n = \beta \cdot (a_n - a_{n-1}) + (1-\beta) \cdot b_{n-1} \quad (10)$$

α and β are smoothing factors, where these can be found within the interval $\alpha, \beta \in [0,1]$, being determined by minimizing the sum of squares of the forecast errors. Each prediction is computed based on the previous one, so the slope b_n of the series is multiplied by the forecast horizon, k,

and this will be added with the intercept of the series, a_n the estimated values of the series will be determined by the relationship:

$$\hat{Y}_{n+k} = \hat{a}_n + \hat{b}_n \cdot k \quad (11)$$

The initial value of a_1 , is usually Y_1 , while b_1 is general set to be equal with 0, or with the average of the initial values of the series, or with the difference of the initial observations.

D. Holt –Winters Multiplicative Exponential Smoothing Technique (MHWEM)

This method is appropriate for series with a linear trend and multiplicative seasonal variation, the smoothed series is given by:

$$\hat{Y}_{n+k} = (a + b \cdot k) \cdot c_{n+k} \quad (12)$$

Where a_n a is the intercept, while b_n is the trend of the series and c_n the multiplicative seasonal factor, each of these three coefficients are defined by the following recursions:

$$a_n = \alpha \cdot \frac{Y_n}{c_{n-s}} + (1 - \alpha) \cdot (a_{n-1} + b_{n-1}) \quad (13)$$

$$b_n = \beta \cdot (a_n - a_{n-1}) + (1 - \beta) \cdot b_{n-1} \quad (14)$$

$$c_n = \gamma \cdot \frac{Y_n}{a_n} + (1 - \gamma) c_{n-s} \quad (15)$$

Where α, β and γ are smoothing factors, where these can be found within the interval $\alpha, \beta, \gamma \in [0,1]$, and are determined by minimizing the sum of squares of the forecast errors while s is the seasonal frequency component. The forecasts are computed as:

$$\hat{Y}_{n+k} = (\hat{a}_n + \hat{b}_n \cdot k) \cdot \hat{c}_{n-s+k} \quad (16)$$

The initial value of a_s are equal with the average of the initial values of the series from the first

seasonal cycle, $a_s = \frac{1}{s} \cdot \sum_{i=1}^s Y_i$, while b_s is given by $b_s = \frac{1}{s} \cdot \left(\frac{Y_{s+1} - Y_1}{s} + \frac{Y_{s+2} - Y_1}{s} + \dots + \frac{Y_{2s} - Y_s}{s} \right)$,

and the the multiplicative seasonal component is estimated by $c_1 = \frac{Y_1}{a_s}; c_2 = \frac{Y_2}{a_s}, \dots, c_s = \frac{Y_s}{a_s}$.

E. Holt –Winters Additive Exponential Smoothing Technique (MHWEA)

This method is appropriate for series with a linear trend and additive seasonal variation, the smoothed series is given by:

$$\hat{Y}_{n+k} = a + b \cdot k + c_{n+k} \quad (17)$$

Where a_n, b_n and c_n are defined as in the previous model, only this time c_n is the additive seasonal factor, each of these three coefficients are defined by the following recursions:

$$a_n = \alpha \cdot (Y_n - c_{n-s}) + (1 - \alpha) \cdot (a_{n-1} + b_{n-1}) \quad (18)$$

$$b_n = \beta \cdot (a_n - a_{n-1}) + (1 - \beta) \cdot b_{n-1} \quad (19)$$

$$c_n = \gamma \cdot (Y_n - a_n) + (1 - \gamma) c_{n-s} \quad (20)$$

Where α, β and γ are smoothing factors, within the interval $\alpha, \beta, \gamma \in [0,1]$, and are determined by minimizing the sum of squares of the forecast errors, while s is the seasonal frequency component. The forecasts are computed as:

$$\hat{Y}_{n+k} = \hat{a}_n + \hat{b}_n \cdot k + \hat{c}_{n-s+k} \quad (21)$$

The initial values of the additive seasonal factor are estimated by: $c_1 = Y_1 - a_s$; $c_2 = Y_2 - a_s$, ..., $c_s = Y_s - a_s$.

F. ARIMA Models

Autoregressive moving average models -ARMA(p,q)- are recommended to be based on stationary series, with the form:

$$Y_n = a_1 Y_{n-1} + a_2 Y_{n-2} + \dots + a_p Y_{n-p} - b_1 \varepsilon_{n-1} - b_2 \varepsilon_{n-2} - \dots - b_q \varepsilon_{n-q} + \varepsilon_n \quad (22)$$

$$\rightarrow Y_n - a_1 Y_{n-1} - a_2 Y_{n-2} - \dots - a_p Y_{n-p} = \varepsilon_n - b_1 \varepsilon_{n-1} - b_2 \varepsilon_{n-2} - \dots - b_q \varepsilon_{n-q} \quad (23)$$

$$\rightarrow (1 - a_1 L - a_2 L^2 - \dots - a_p L^p) Y_n = (1 - b_1 L - \dots - b_q L^q) \varepsilon_n \quad (24)$$

$$\rightarrow \phi(L) Y_n = \theta(L) \varepsilon_n \quad (25)$$

Where p is the order of the autoregressive part, while q is the order of the moving average part, and ε_n represents the white noise. Validation of ARMA (p,q) models is based on minimizing the AIC and BIC criterias, also by verifying the correlation of the error terms of the model, finally measuring the departure from normality of these. The ARMA models, as stated, can only be used on stationary series. A series is stationary if its values oscillate around a reference level. In the terminology of time series analysis, if a time series is stationary it is said to be integrated of order zero, or I(0) for short. If a time series needs one differential operation to achieve stationarity, it is an I(1) series, and a time series is I(n) if it is to be differenced for n times to achieve stationarity. So for nonstationary series the ARIMA (p,d,q) models will be used, namely the autoregressive integrated moving average models, where d is the order of differentiation for the series to become stationary. So an ARIMA (p,d,q) model can be rewritten as:

$$\phi(L)(1-L)^d Y_n = \theta(L) \varepsilon_n \quad (26)$$

Where L is the lag operator, and the order of differentiation is equal to: $\Delta^d Y_n = (1-L)^d Y_n$ (27)

E. Forecasting results:

The forecasting results are measured by the following indicators:

$$\text{Sum of squared errors: } SPE = \sum_1^{n+k} e_{n+1}^2 = \sum_1^{n+k} (\hat{Y}_n - Y_n)^2 \quad (28)$$

$$\text{Root mean squared error: } RME = \sqrt{\sum_1^{n+k} (\hat{Y}_n - Y_n)^2 / (n+k)} \quad (29)$$

$$\text{Mean absolute error: } MAE = \sum_1^{n+k} |\hat{Y}_n - Y_n| / (n+k) \quad (30)$$

$$\text{Bias Proportion: } DM = \left(\left(\sum_1^{n+k} \hat{Y}_n / (n+k) \right) - \bar{Y} \right)^2 / \sum_1^{n+k} (\hat{Y}_n - Y_n)^2 / (n+k) \quad (31)$$

Shows how far the mean of the forecast is from the mean of the actual series.

$$\text{Variance Proportion: } DV = (\sigma_{\bar{Y}} - \sigma_Y)^2 / \sum_1^{n+k} (\hat{Y}_n - Y_n)^2 / (n+k) \quad (32)$$

Where $\sigma_{\bar{Y}}$, σ_Y represent the standard deviation of the series \hat{Y}_n respectively Y_n , indicating how far the variation of the forecast is from the variation of the actual series Y_n .

$$\text{Covariance Proportion: } DCOV = 2(1 - \text{cov}(\hat{Y}_n, Y_n)) \cdot \sigma_{\hat{Y}} \cdot \sigma_Y / \sum_1^{n+k} (\hat{Y}_n - Y_n)^2 / (n+k) \quad (33)$$

Where $\text{cov}(\hat{Y}_n, Y_n)$ represents the relationship between the forecasted series \hat{Y}_n , and the actual series Y_n ; the proportion measuring the remaining unsystematic forecasting errors.

Theil Inequality Coefficient:

$$CT = \sqrt{\sum_1^{n+k} (\hat{Y}_n - Y_n)^2 / (n+k)} / \sqrt{\sum_1^{n+k} \hat{Y}_n^2 / (n+k)} + \sqrt{\sum_1^{n+k} Y_n^2 / (n+k)} \quad (34)$$

This coefficient lies between $[0;1]$, where a value close to 0 indicates a perfect fit of the forecasted series, \hat{Y}_n to the actual one Y_n .

IV. Empirical findings

The statistical data used in this study consist of daily exchange rate between 6 currencies, which were extracted from <http://bnr.ro/>. The sample period is from 03 January, 2011 to 22 April, 2011; totalling 80 daily observations for each series, on 16 weeks. The exchange rates are: EUR/RON, USD/RON, GBP/RON, JPY/RON, CNY/RON, RUB/RON.

These exchange rates were selected because of their role in international transactions of Romania. The results of the first five models are compressed in (Table 1), namely in (Table 2), together with the forecast evaluation coefficients.

To identify the adequate $ARIMA(p, d, q)$ model, the stationarity of the series was tested, by applying the *testele ADF-Augmented Dickey-Fuller* and *PP-Phillips-Perron* unit root tests. At these tests the results regarding the stationarity of the indices are the same, namely the series EUR/RON, USD/RON, JPY/RON, CNY/RON are stationary, in the case in which the observed series has no intercept and no trend, $\Delta y_t = \theta y_{t-1} + \sum_{i=1}^p \phi_i \Delta y_{t-1} + \varepsilon_t$, with a probability of 95%, so $d=0$.

The other series, GBP/RON și RUB/RON, are nonstationary, at first differentiation they become stationary, so they are $I(1)$, and $d=1$.

Table 1. Forecast results obtained by applying the Single, Double and Holt –Winters Simple Exponential Smoothing Techniques

	<i>A. MNES</i>			<i>B. MNED</i>			<i>C. MHWES</i>			
	α	<i>SPE</i>	<i>RME</i>	α	<i>SPE</i>	<i>RME</i>	α	β	<i>SPE</i>	<i>RME</i>
EUR/RON	0,999	0,009	0,010	0,412	0,010	0,011	0,930	0,000	0,008	0,010
USD/ RON	0,999	0,037	0,021	0,554	0,041	0,023	1,000	0,000	0,032	0,020
GBP/RON	0,999	0,065	0,028	0,508	0,079	0,031	1,000	0,020	0,060	0,027
JPY/ RON	0,772	0,000	0,000	0,382	0,000	0,000	0,720	0,000	0,000	0,000
CNY/RON	0,983	0,001	0,003	0,528	0,001	0,003	0,960	0,000	0,001	0,003
RUB/RON	0,999	0,000	0,001	0,522	0,000	0,001	1,000	0,020	0,000	0,001

(Source: Author`s calculations)

Table 2. Forecast results obtained by applying Holt –Winters Multiplicative and Additive Exponential Smoothing Techniques

				<i>D. MHWEM</i>		<i>E. MHWEA</i>	
	α	β	γ	<i>SPE</i>	<i>RME</i>	<i>SPE</i>	<i>RME</i>
EUR/RON	0,920	0,000	0,000	0,008	0,010	0,001	0,010
USD/ RON	1,000	0,000	0,000	0,033	0,020	0,033	0,020
GBP/RON	1,000	0,000	0,000	0,061	0,028	0,061	0,028
JPY/ RON	0,740	0,000	0,000	0,000	0,000	0,000	0,000
CNY/RON	0,980	0,000	0,000	0,001	0,003	0,001	0,003
RUB/RON	1,000	0,000	0,000	0,000	0,001	0,000	0,001

(Source: Author`s calculations)

To determine the autoregressive order, namely the moving average order the PAC- partial autocorrelation coefficients and the AC- autocorrelation coefficients were evaluated. To validate the obtained models the significance of the coefficients was tested, all the parameters of the model are significant with a probability of 95%. The second set of tests was applied to the residuals, to establish if they follow a white noise process. So the autocorrelation of the residuals was tested by the Q Statistics, at Q(10), Q(15) and Q(30), all indicating that the first 30 correlations between the residual are insignificant. To investigate the normality of the residuals the Jarque-Bera test was applied, which indicates that they are normally distributed. The final results of ARIMA models (p, d, q) can be found in (Table 3) while the forecast coefficients indicators are in (Table 4.).

Table 3. Forecast results obtained by applying the ARIMA(p, d, q) model

	ARIMA(p,d,q)	AIC	BIC	R ²	Q(10) Statistics	Q(15) Statistics	Q(30) Statistics)	Jarque-Bera
EUR/ RON	ARIMA(1,0,0)	-6,331	-6,300	0,976	11,331 (0,254)	14,162 (0,438)	25,108 (0,673)	0,649 (0,723)
USD/ RON	ARIMA(1,0,0)	-4,942	-4,911	0,977	5,404 (0,798)	9,546 (0,795)	17,898 (0,946)	0,094 (0,954)
GBP/ RON	ARMA(1,1,1)	-4,377	-4,287	0,082	0,686 (0,877)	10,204 (0,667)	17,962 (0,927)	2,269 (0,322)
JPY/ RON	ARMA(4,0,6)	- 13,056	- 12,933	0,959	4,265 (0,641)	5,040 (0,929)	9,631 (0,999)	3,729 (0,155)
CNY/ RON	ARMA(1,0,0)	-8,852	-8,822	0,977	4,885 (0,844)	8,481 (0,863)	15,821 (0,977)	1,749 (0,417)
RUB/ RON	ARMA(1,1,3)	- 12,137	- 12,046	0,052	8,288 (0,308)	10,640 (0,560)	28,774 (0,372)	2,022 (0,364)

(Source: Author`s calculations)

Table 4. Forecast evaluation coefficients for the ARIMA(p, d, q) model

	RME	MAE	DM	DV	DCOV	CT
EUR/ RON	0,034	0,027	0,500	0,119	0,380	0,004
USD/ RON	0,054	0,042	0,526	0,117	0,358	0,009
GBP/ RON	0,103	0,088	0,677	0,024	0,298	0,011
JPY/ RON	0,001	0,001	0,265	0,036	0,699	0,009
CNY/ RON	0,007	0,006	0,441	0,151	0,408	0,008
RUB/ RON	0,002	0,002	0,021	0,978	0,000	0,011

(Source: Author`s calculations)

V. Conclusions

All the results indicate the appreciation of the Romanian Leu against the other currencies. In the case of the first five forecast techniques the results are similar, from the point of view of the forecast coefficients, which points out that the optimal models were found. The exponential smoothing techniques in some cases outperform the ARIMA models, because of the speed with which they adapt to the smallest changes to the market conditions. In addition, the ARIMA models present some difficulties in estimating and validating the model, are more effective in rendering the medium-term trend, in our case 4 months. So these models show the changes in trend, while the forecasting models based on exponential smoothing techniques are an effective tool for those interested in the evolution of the exchange rate.

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MEASURES AND INSTRUMENTS USED AS A RESPONSE TO CRISES IN EUROPEAN UNION – AN OVERVIEW

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During latest times, financial crises have been a common occurrence in emerging market (and transition) countries with negative influence for the economies. Financial crises have had negative effects on real output, work force, poverty and political instability. Latest crises (2008) that struck US become international, its consequence being received in European countries too. This paper wants to discuss some intervention measures taken in the European Union Area and some important funds used as tools for crises fighting. The European Economic Recovery Plan and EU funding mechanisms (The European Social Fund (ESF) and The European Globalization Adjustment Fund (EGF)) are taken into discussion.

Key words: crises prevention instruments , financial system, The European Economic Recovery Plan and EU funding mechanisms (The European Social Fund (ESF) and The European Globalization Adjustment Fund (EGF))

JEL classification: G10, G20

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Actual crises (started in summer 2007) is considered to be without precedent in post-war economies related to its size and extend, but also has many common features with recessions in the past. The crises was headed, in an international approach, by a rapid credit growth, availability of liquidity at a low price, low risk premiums, strong leveraging, development of bubbles in real estate sector (US subprime market). In Romania, the crises was preceded by easy credit access (so called “creditul cu buletinul”), rising prices in real estate sector explained by trouble-free admission to credit, growth in imports and consumption, growing wedges (in some sectors). These factors contribute to vulnerable financial institutions that jeopardize the entire system. Such occurrences happened before (Japan and the Nordic countries in the early 1990s, the Asian crisis in the late-1990s), but this time, the crisis became global.

In its early stages, the crisis manifested with an heightened liquidity shortage among financial institutions, rising the concerns about solvency of financial institutions, and culminating with the default of Lehman Brothers. After that, confidence collapsed, investors considerable liquidate their positions, and stockmarket went into crisis. Related to EU economy, this downturn was compared to facts happened during the Great Depression of the 30’s.

International background

Crises in statistic data- an overview

The world economy faced during latest period severe stress tests and criticisms of the authorities and civil society around the world, the banks being made responsible for the financial crisis started in 2008. Recently, the Basel Committee on Banking Supervision, the agency to monitor international banking activity, said the world's largest banks have a cash deficit of 1.730 trillion

Euros (2.287 trillion U.S. dollars), a problem are required to solve in the next three years. Also, the 91 largest banks and a capital deficit of 577 billion Euros compared to 7% level that you must meet to enter into class I, a measure of financial stability. Although markets were ready to hear capital deficit, and the reduction of liquidity shock could be more difficult to repair, since the euro area faced market dysfunctions.

For the first time since 1980, world economic growth fell into negative trend (-0.6%), with the euro area economy declining 4.1 %. Trade has been adversely affected, dropping more than 20% at global level and 16% at European level.. It is estimated that the performance of EU Member States will be among the weakest, with a growth of 1 % against 4.6%, on average, at world level. Government stimulus was significant in 2009: average fiscal deficit at EU level reached almost 7% of GDP and public debt as a share in GDP increased by 12 %age points (and an additional rise by around 6 %age points is foreseen for 2010). These developments are not sustainable and therefore call for fiscal consolidation measures in most European economies. The withdrawal of fiscal stimuli may hamper the resumption of economic growth in Romania's main trading partners and could adversely affect demand for Romanian exports in the future. The international financial system received a strong support from monetary and fiscal authorities in 2009. Central banks in many developed economies resorted to extraordinary policy measures to provide liquidity². Monetary policy rates dropped to historical lows (1 % in the case of the single European currency and near 0 % in the case of the US dollar). Given that the standard monetary policy easing measures have been almost exhausted, some central banks switched from the yield-based approach to a quantitative one.

The central banks of those advanced economies saw a significant increase in the size of their balance sheets and in the maturities of their asset holdings. Most major global banks meet minimum capital requirements, but many would be forced to restrict the payment of bonuses and dividends, if the new rules of Basel III (which regulates banking activity) should be applied immediately. That is why, according to the agreement, the requirements will be met by one, over eight years. It is believed that new regulations, much tougher to maintain a capital "healthy" for at least 7% (compared to 4.5% as it was before), will have a modest impact on the overall economy, despite business feared a negative impact on output and unemployment (see below - 1.4. Basel Accords requirements). Basel Committee said that if measures are implemented over a period of eight years, as is planned, would result in a maximum decline of 0.22% of global GDP. In addition, given that Basel III will be introduced between 2013 and 2019, the maximum impact on GDP would not be seen only in nine years. These new regulations could "cut" 3% of economic growth over the next five years in the U.S., Euro zone and Japan could eliminate 10 million jobs.

The debt crisis emerged in the Euro area , where banks are deeply involved. German banks have borrowed amount equivalent to 6% of GDP in Germany to Ireland and another 6.2% to Spain. Thus, over 12% of the GDP of most powerful countries in the European Union is in the hands of two countries with the highest risk. Also, British banks such as Barclays and HSBC should be to recover loans to Ireland, which is equivalent to 9.4 per cent of UK GDP. Amounts equivalent to 5.7% of British GDP is in the form of bank loans in Spain.

Dutch banks appear to be located in the worst case, the amount representing 16.4% of GDP of the country borrowed Spain. Amounts due to banks equivalent are closed to 13% of GDP in Portugal, and 8.9% of GDP in France. Ireland, which just received a loan of around EUR 85 billion from the IMF and the EU. Irish banks have lost a third of deposits due to fears of bankruptcies and, moreover, have borrowed amount equivalent to 14.5% of GDP. American banks are not better from this point of view, borrowing, together, 353 billion dollars to Portugal, Ireland, Greece and Spain. To prevent a real disaster, Ireland is already the fourth nationalization of the banks, Allient Irish Banks (AIB), which offered 3.7 billion Euros. (all data is in

concordance with). The world economy deteriorated significantly in 2009 (down 0.6 %), its first contraction in 30 years, while the EU economy saw a sharper fall (more than 4 %), the important government stimulus packages notwithstanding.

The Romanian economy followed a similar trend as the other countries in Central and Eastern Europe, except Poland. The economic contraction was sharp (7.1%) and the fiscal deficit widened substantially (to 7.4 % of GDP) (according to European economic statistics, Eurostat, 2010, accessed on epp.eurostat.ec.europa.eu/cache/ITY.../KS-GK.../KS-GK-10-001-EN.PDF: 1-7).

Global crises and effects on EU

Some authors suggests that actual crises has three phases:

The first phase – so called “toxic securities” – began in the United States, than spread to Europe through the banking systems in which these high-yield and financial instruments with high-risk accounted for large intermediation.

The second phase of the crisis was marked by the reduction of the economic activity in 2009. To combat the effects of the crises, the ECB adopted a expansion monetary policy, and fiscal stimulus was introduced in almost all EU countries.

The third phase of the crisis, that is typically assigned to EU, began with the “discovery” of the critical state of the public finances in Greece in early 2010 (other countries faced the same situation e.g. Portugal) and the rapid contagion of most of the European sovereign debt market.(Saccomani, 2001: 3)

In response to downturn of the European economy, EU took a series of actions, most important of the measures for crises fighting being as follows:

- the stimulus package – the European Economic Recovery Plan (EERP)
- EU funding mechanisms: The European Social Fund (ESF) and the European Globalization Adjustment Fund (EGF).
- Europe 2020 strategy – New skills for new jobs.

The European Economic Recovery Plan

Objectives, major pillars and key principle of the EERP

As a response to crises, a European Economic Recovery Plan (EERP) was proposed by the Commission in a communication to Parliament in November 2008, with the declared goal of crises fighting. The EERP had two major pillars and one key principle. The first pillar was aiming the boost of economic demand and stimulation of consumer s confidence. The second pillar referred the competitiveness in the long term. The underlying principle was solidarity and social justice. Regarding the first pillar the Commission’ proposal was that Member States and the EU to agree a budgetary impulse amounting 200 billion Euros (1.5% of EU GDP) in order to boost demand. The second pillar proposed “smart” investments for tomorrow needs: investing in energy efficiency to create jobs and save energy; investing in infrastructure and inter-connection; investing in clean technology to boost construction and automobiles sectors for preceding the low-carbon future market. As regards of the challenges the EERP was to open up new finances for SMEs, cut administrative burdens and start investments to modernize infrastructure (Barroso 2008: 3).

The strategic aims of the EERP were: stimulate demand and boost confidence of the consumers; lessen the human cost of economic crises; tune the economy for future needs as Lisbon Strategy for Growth and Jobs statutes by structural reforms, innovation and building knowledge economy; speed up shifts to low carbon economy through new technologies, new green collar jobs, open up new opportunities in fast growing world markets.

For achieving tactical aims the EERP proposed to exploit the synergies and avoid spillover effects, use all available policies, focusing on fiscal policies, structural and financial market reform, also ensuring coherence between strategic and tactical aims.

Actions for supporting real economy in boosting confidence

In order to achieve this goal, taken actions had to combine monetary and credit aspects, budgetary policies and actions in Lisbon strategy for growth and jobs. Even if all actions are important, our paper focuses on budgetary policy actions. Even though some monetary and credit conditions are taken into discussion. In this approach, it become important to emphasize the role of the European Central Bank and other central banks, the role of national banks, and the role of European Investment Bank and the European Bank for Reconstruction and Development.

Role of ECB, central banks, EU banks, EIB and EBRD

In time of crises, it is considered that monetary policy has a crucial role in order to achieve the reduction of inflation over the medium-term. Some actions had been done; ECB along with other EU central banks had been already cut interest rates, being a scope for further reductions. The objective was to the stabilization of markets and contribution to liquidity.

Reliable and well function financial system (primarily the financial sector) is a premise to a healthy, growing economy, so stabilizing the banking system becomes an important step for promoting a sustainable recovery. The Commission proposal refers to major financial support provided by the Member States to the banking sector for encouraging normal lending activities and boost investments. Related to EIB and EBRD, current crises reinforced interventions, EIB was expected to increase its early intervention with 15 billions Euro, to incorporate reserves to reinforce its capital base (60 billions Euro), and EBRD was also supposed to add 500 millions Euro per year to its level of financing (according to *Communication from the Commission to the European Council – A European Recovery Plan*, COM (2008) 800, 2008: 7, presented on the official website of the European Commission).

Proposals related to Budgetary Policy

In time of crises budgetary policy has an even important role in stabilization of the economy and sustain demand. The Commission recommended a co-ordinated policy in the Member States, focused on budgetary stimulation packages. The proposals for 2009 Related to national budgets included an budgetary impulse of 170 billions Euro (1.2% of Union's GDP) in order to achieve the growth of the European economy and lower the unemployment. Growing expenditures and/or reductions of taxation were also proposed. The budgetary stimulation should have taken account of the starting position of the states. For states, particularly those from outside the Euro area, which were facing significant external and internal imbalances, policy had to essentially target the correction of such imbalances.

The budgetary stimulation was designed to respect the following principles:

- should be co-ordinated and used temporarily;
- should use revenue and expenditure as budgetary instruments;
- Stability and Growth Pact should be respected;
- should be accompanied by other structural reforms in order to grow the demand.

Conclusions of the EERP

The European Economic Recovery Plan was designed to impulse Europe's economy. It was proposed for achieving the following targets:

- European Commission and the Council should work together to ensure that national and EU measures would amount 1.5% of GDP;

- make use of impulse measures respecting the flexibility in accordance with the Stability and Growth Pact;
- accelerate the proposed actions outlined in the European Economic Recovery Plan by legislative activity needed for implementing these measures;
- identify any further measures necessary at EU and Member State level to stimulate the recovery;
- work together with international partners to implement global solutions to strengthen global governance and achieve the economic recovery.

EU funding mechanisms

The European Social Fund (ESF)

The Fund is considered to be the EU's largest instrument for intervention on labour markets and for investing in people. The amount of money spending is more than €10 billion per year. The goal is to give support for Member States to reform labour markets and their institutions. The crises intervention through this instruments consisted in €19 billion of the ESF's operations in 2009-2010 targeted to assist Member States for "rapid reaction packages" together with social partners.

Related to Fund management during crises, the rules were simplified, in order to achieve the following goals:

- guidance on good practices to foster implementation;
- interventions for targeted employment services with upskilling and training measures;
- mobility and entrepreneurship incentives,
- support for those in particularly difficult situations, such as young people or older workers.
- training measures focused on the shift towards a green economy.

The European Globalization Adjustment Fund (EGF)

The Fund was created to support workers who lose their jobs in cases where enterprises shut down, factories are relocated to a country outside the EU, or a sector loses many jobs in a regio., The EGF can help workers to find new jobs . The intervention is set to maximum annual amount of €500 million. The EGF provides one-off, time limited individual support through active measures as follows:

- job search assistance, occupational guidance, tailor-made training and retraining, including IT skills and certification of acquired experience, outplacement assistance and entrepreneurship promotion or aid for self-employment;
- special time-limited measures, such as job search allowances, mobility allowances or allowances to individuals participating in lifelong learning and training activities.

In order to fight the crises, some amendments were introduced for simplifying the Fund procedures. Some major changes are presented below:

- the redundancy threshold was lowered to a ceiling of 0.35 % of the annual maximum amount of the EGF, used to finance administrative and technical assistance
- co-financing rate was increased.
- indirect costs of Grants (declared on a flat-rate basis) became eligible for a contribution from the EGF of up to 20 % of the direct costs of an operation.
- period for the eligible actions was extended. (***, EU's Response to the Crisis:2)

Conclusions

The EU recession recovery is proving to be slow and fragile, with lots of disparities through European countries. The growth was modest in some Member States, and other are still in recession. Given the future economic growth foreseen for 2011, unemployment is likely to begin

declining this year. Future challenges for the EU and its Member States are related to the balance and measures to fight crisis, called crises exit strategies. The main objective is to support further economic growth and employment, the minimization of difficult labor market conditions during the recovery and beyond. This increase is needed for labor market policies. Those are aimed at preventing long-term unemployment, helping peoples to maintain or find a job.

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OVERVIEW OF THE RELEVANT INDICATORS OF DEFAULTED AND NON-DEFAULTED COMPANIES AND POSSIBILITIES OF IMPROVEMENT FOR THE RATING SYSTEMS USED BY THE ROMANIAN COMMERCIAL BANKS

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Since the beginning of the financial and economic crises many news came to light which discussed the increasing number of non-performing loans, and the fact that as a result of the company break-downs, the bank portfolios have also gone worse and worse. In this paper our goal is to find out which internal factors influence the solvency of a company, therefore, to point out the weaknesses of the current Romanian rating systems, which as we will see, do not take into only relevant criteria when according a loan to a company. In order to conduct this study, we choose 18 indicators from several categories to predict bankruptcy. Some of the indicators mentioned above are really common in the international and the Romanian literature (e.g. ROA, ROE, ROS, assets turnover ratio), some of them are less. On a sample of 3000 Romanian companies we use the T-test statistical method to find out if an indicator is significant or not. The sample consists of companies (defaulted and non-defaulted as well) which have presented their financial statements (balance, profit and loss account between 1999 and 2008). For each company a set of 18 financial indicators was calculated, but the results obtained show that only 8 of them is significant in predicting bankruptcy: ROA, assets turnover ratio, equity/total assets, general leverage, current assets to total assets, cash to total assets, total assets and sales. In the next step, by analyzing the obligatory forms used in credit lending, we conclude which indicators are used by different Romanian commercial banks. We found that only four out of seven banks calculate all of the significant indicators identified in the first part of the paper. Finally, we made a proposal about which quantitative indicators should the banks use to minimize the credit losses and to avoid the overdue payments. In addition, we consider that the banks should pay attention to the qualitative factors as well to effectively filter out non-performing loans.

Keywords: corporate failure, default, risk, financial ratios, rating systems, Romania

JEL-codes: G32, G33, D22

I. Introduction

The subject of our paper is a typical bank management issue whose importance is standing out now more than ever due to the financial crisis of the present days. As we know, because of the influence of the declining economy, many banks face the problem of late payments (1) and non

performing credits. This trend is also true for the corporate credit portfolios of the Romanian commercial banks (2). In this paper we try to reveal those deficiencies of the rating systems used in the Romanian bank sector which result in the erroneous consideration of the credit applies. We want to know what kind of economic and financial indexes are used by banks during the consideration of a credit apply, and which are significant in the prediction of the solvency of companies according to the relevant literature in the domain. Having studied the literature, we choose 18 relevant indexes that we calculate afterwards for more than 3000 companies from the county of Maros in the period of 1999-2008. Firstly, we determine the average of the indexes in the case of solvent and non-solvent companies, searching for significant differences. Secondly, we make a research to find out which are the indexes used by some Romanian banks (3). In the conclusion we offer a recommendation referring to the indexes which should be used to increase the commercial banks' rating system's efficiency.

II. Literature review

Both the national and the international literature are dealing with the topic of the non-solvency prognosis. In our project we are searching for the explanatory indexes which are significant and relevant in analyzing the solvency of the Romanian companies. The relevant indexes, their definition and empirical support are presented in the table below. In the last column we mention the name of the author in whose work the respective indicator was used.

Table 1: Name, definition and empirical support of indicators

Indicator	Name	Definition	Empirical Support
ROE	Return on equity	Net Income/ Equity	Malcom, S. & Dah, K. (2007); Andreica, M. et all (2008); Mazilescu, V. et all (2010); Barbuța-Mișa, N. (2010)
ROA	Return on assets	Net income/Total assets	Malcom, S. & Dah, K. (2007); Bonfim, D. (2007); Andreica, M. et al. (2008); Trenca, I. & Benyovszki, A. (2009);
ROS	Return on sales	Net income (before interest and tax)/ Sales	Cielien, A. et al(2004); Malcom, S. & Dah, K. (2007); Trenca, I. & Benyovszki, A. (2009);
Costumer rotation speed	Costumer rotation speed	Net tincome/ Number of costumer	
Costumer rotation time	Consumer rotation time	365/ Costumer rotation speed	
Assets rotation speed	Assets rotation speed	Net income/ Total assets	Malcom, S. & Dah, K. (2007); Trenca, I. & Benyovszki, A. (2009)
Equity ratio	Equity ratio	Equity/Total assets	Clien, A. Et al (2004); Bonfim, D. (2007); Trenca, I. & Benyovszki, A. (2009); Mazilescu, V. et al. (2010)
Indeptedness	Debt ratios	Total debt/ Total assets	Laitinen, E & Laitinen, T. (2000); Kenneth, C. et al (2004); Trenca, I. & Benyovszki, A. (2009); Barbuta-Misa, N. (2010); Abbas, Q. & Abdul,R. (2011)
Solvency	Solvency	Liabilities/ Own equity	Trenca, I. & Benyovszki, A. (2009); Laitinen, E. & Laitinen, T. (2000)
Liabilities cover	Liabilities cover	Number of costumer/ Liabilities	
Fixed assets cover	Fixed assets cover	Own equity/ Fixed assets	
Capital ratio	Capital index	(Fixed asset+ Stocks)/ Own equity	

Indicator	Name	Definition	Empirical Support
Current assets ratio	Current assets ratio	Current assets/ Total assets	Abbas, Q. & Abdul, R., (2011)
Liquid assets	Liquid assets ratio	Liquid assets/ Current assets	Trenca, I. & Benyovszki, A. (2009)
Total Balance Sheet	Total Balance Sheet	Log (Balance Sheet)	
Net income	Net income	Log (Net income)	Kenneth, C. et al. (2004); Bonfim, D. (2007)
Fixed assets return	Fixed assets return	Net income/ Fixed assets	
Short term cover	Short term cover	(Liquid assets+ Accounts receivable)/ Fixed assets	

Source: Own editing

The outcomes of the researches are different, depending on the corporate structure of the countries and the industries examined. Malcom S. and Dah, K (2007) considered to be relevant the ROA, ROS and assets rotation speed, indicators also examined by us. In addition to those listed above, Trenca, I. and Benyovszki, A. (2009) consider that the proportion of the own capital, the indebtedness, the solvency and the proportion of the funds are also important factors. According to the research of Bonfim, D. (2007) the ROA, the own equity and net income are significant. The following authors consider significant variables in predicting the bankruptcy: Andreica, M. et al. (2008) ROA and ROE, Mazilescu, V. et al (2010) ROE and the own equity ratio, Barbuta-Misa, N. (2010) ROE and debt ratio, Clie, A. et al. (2004) ROS and own equity ratio, Laitinen, E & Laitinen, T. (2000) debt ratio and solvency, Kenneth, C. et al. (2004) debt ratio, Abbas, Q. & Abdul, R., (2011) current assets ratio.

III. Methodology

We test 18 indexes (4) of around 3000 companies in county Mures, based on their financial statements in the period 1999-2008. In the examined period different number of solvent and non-solvent company data was processed. These numbers are specified in the next table by their dummy variable (5). The ratio presented shows the percentage of the defaulted companies in the current year.

Table 2: Sample composition

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Defaulted companies	52	60	68	50	105	131	147	151	111	72
Non-defaulted companies	963	1093	1206	705	1738	2087	2389	2732	3236	3618
Total	1015	1153	1274	755	1843	2218	2536	2883	3347	3690
Ratio	5,12%	5,20%	5,34%	6,62%	5,70%	5,91%	5,80%	5,24%	3,32%	1,95%

Source: Own editing

We use the T-test method (6) to choose the significantly determining factors of the solvency of the companies. The applicability criteria of the test is the matching of the standard deviations, which we test using the F-test (7). We work with a 5% significance level. The Independent Samples T Test compares the mean scores of two groups on a given variable.

Furthermore, based on the forms used, and the requested documents in the event of a loan request we examine seven Romanian commercial banks (Banca Transilvania, Bancpost, BCR, BRD,

CEC Bank, OTP Raiffeisen Bank, Volksbank) which are considering the above mentioned indexes in their evaluation process. We try to guess which indicators of those found significant are used by them.

IV. Results

The T-test (6) data from Table 3. (see Appendix) are used as the main criteria in our way to choosing the significantly determining factors of the solvency of the companies. The applicability criteria of the test is the matching of the standard deviations, which we test using the F-test (7). Table 3 contains the results of the T-test (8).

The data from the table shows, that during the ten years, different variables proved to be significant (in total 8 indices): the **ROA** eight times, the **assets rotation speed** nine times, **own equity ratio** five times, **debt rate** six times, **current asset ratio** five times, **liquid assets** five times as well, **total balance sheet** eight times, and **net income** was significant only in one year. None of the other ten variables can be used in order to predict bankruptcy.

In addition, we analyzed the forms of the commercial banks, which are used in the landing process. The required documents at OTP bank include the yearly balance sheets for the last ten years and a monthly balance sheet from the last 3 months. The bank also requires information about the business activity. Thus, in the case of the OTP bank all of the data is available from the documents to calculate the eight indicators, that were found significant in our study. Just like for the OTP bank, we found that for the BCR, Banca Transilvania and BRD the relevant data are obtainable, and thus they shouldn't find it difficult to assess which companies will be able to pay back their loans and which not.

At the Raiffeisen Bank, CEC Bank and Volksbank among the two yearly balance sheets, the form only asks about the structure of the own equity. Using these documents only the ROA, the own equity ratio, debt rate, current assets ratio, liquid assets, total balance sheet can be calculated. However the rotation speed of assets and net income, which proved to be significant nine times, cannot be calculated.

V. Conclusions

This work focused on identifying the financial indicators which are significant in the prediction of the solvency of companies. The research was elaborated with the use of a sample containing about 3000 companies having their financial statements in the period of 1999-2008. For each company 18 financial indicators were calculated (ROE, ROA, ROS, Costumer rotation speed, Costumer rotation time, Assets rotation speed, Equity ratio, Indepthedness, Solvency, Liabilities cover, Fixed assets cover, Capital ratio, Current assets ratio, Liquid assets, Total Balance Sheet, Net income, Fixed assets return, Short term cover), but the results obtained show that only 8 variables influence significantly the probabilities of default of the companies. the ROA eight times, the assets rotation speed nine times, own equity ratio five times, debt rate six times, current asset ratio five times, liquid assets five times as well, total balance sheet eight times, and net income was significant only in one year. None of the other ten variables can be used in order to predict bankruptcy.

However, all of these variables are quantitative indicators, but we consider that the qualitative factors have a key role in predicting bankruptcy and the banks should develop a more quantifiable, integrated system for measuring them. We believe that the economic sector, the industry have a major importance as well in the prediction of the solvency of the firms, aswell as the management, partners, and other elements, as well. In the future we intend to analyse these variables, too.

VI. Notes

1. According to the reports of the National Bank of Romania the number of loans rated as bad loans were triple in 2010 compared to 2008
2. According to the reports of the National Bank of Romania around 1% of the loans granted to SMEs in 2008 were delayed, while in 2010 this reached 10%. At large companies this rate raised from 0.3% to 3.2%
3. Banca Transilvania, Bancpost, BCR, BRD, CEC Bank, OTP, Raiffeisen Bank, Volksbank
4. Return on equity, Return on assets, Return on sales, Costumer rotation speed, Costumer rotation time, Equity ratio, Assets rotation speed, Indeptedness, Solvency, Liabilities cover, Fixed assets cover, Capital ratio, Current assets ratio, Liquid assets, Total Balance Sheet, Net income, Fixed assets return, Short term cover
5. Dummy variable: 0 value, if the company defaulted and 1 value, if the company didn't default
6. Independent sample T - test
7. The hypotheses: a H0: the standard deviations do not differ significantly in case of the two samples (defaulted and non-defaulted companies); H1: significantly differ
8. The hypotheses: a H0: the means do not differ significantly in case of the two samples (defaulted and non-defaulted companies); H1: significantly differ

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VIII. Appendix

Table 3.: Significant variables on a 5% significance level, according to the T-test

	1999		2000		2001		2002		2003		2004		2005		
	F*	T**	F	T	F	T	F	T	F	T	F	T	F	T	F
ROA	0.03	0.02			0.20	0.05	0.08	0.01			0.47	0.01	0.73	0.00	0.0
	4.77	-2.46			1.62	-1.99	3.15	-2.45			0.52	-2.49	0.12	-3.05	4.
Assets rotation speed	0.00	0.00	0.00	0.02	0.06	0.02	0.05	0.04	0.05	0.01	0.03	0.00			0.0
	10.37	-5.28	18.26	2.45	3.51	-2.40	3.78	-2.11	3.87	-2.84	4.83	-3.94			3.3
Own equity											0.80	0.02	0.81	0.00	0.9
											0.06	-2.36	0.06	-3.22	0.0
Debt rate							0.07	0.05			0.53	0.01	0.45	0.00	0.3
							3.31	1.98			0.40	2.61	0.57	3.42	1.0
Current assets ratio			0.29	0.00							0.53	0.01	0.08	0.00	0.0
			1.12	3.08							0.40	2.82	3.05	2968.00	4.3
Liquid assets ratio	0.01	0.00									0.06	0.00	0.27	0.00	0.8
	6.98	-3.20									3.67	-3.39	1.24	-3.41	0.0
Total Balance Sheet	0.97	0.00	0.17	0.00	0.56	0.01			0.46	0.00	0.17	0.01	0.23	0.00	0.9
	0.00	3.15	1.88	-3.29	0.34	2.48			0.55	2.64	1.88	2.65	1.43	3.51	0.0
Total income			0.71	0.04											
			1.14	-2.05											

Source: Own editing

* The significance level and the F-value of the F-test

** The significance level and the T-value of the T-test

THE RISK OF FAILURE - CAUSES AND CONSEQUENCES OF THE IT INDUSTRY

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In this paper the author shows the ways to assess the bankruptcy risk using a related system of methods: economic, managerial, banking and statistics. At the end of this paper is addressed this issue with the help of Robertson Model.

Keywords: bankruptcy risk, economic risk, financial risk

JEL Classification: G32

1. Introduction

Business activity is subject to risk at any time. In general, it is considered that risk is the probability that an undesired event occurs.

Depending on its market position, economic and financial situation, economic environment, respectively the climate in which it operates, a company can support more difficult or easier the risks it is subject to. Basically there is no economic activity in which risk does not interfere at a certain time. But its intensity may be different depending on the field, market trends, image of the country in the global context, etc.

2. Method and Results

Companies are usually subject to the following types of risk: economic, financial and bankruptcy. Financial welfare diagnosis is a means of obtaining accurate and qualitative information about the real possibilities of the company at the beginning stage of the economic crisis. A company with a serious analytical system is able to recognize in time the approaching crisis. With the help of financial analysis can be found vulnerable spots in the company's economy and can be proposed efficient solutions for the company to get out of the difficult situation.

In our opinion, *bankruptcy risk* can be defined as the inability of firms to cope with a financial-banking transaction, namely their inability to reimburse in time the sums borrowed under the conditions agreed with the banks in the credit contracts. The risk of bankruptcy can be the result of difficulties showing up that initially, at the analysis stage and also credit evaluation and approval stage could not be identified, but occurred during the contract. Therefore, the diagnosis process of failure risk is to assess the firm's ability to meet commitments to others, therefore in the assessment of company's solvency.

With the purpose of analyzing risk, experts rely on the financial theory that provides a series of concepts that have enabled the recent opening of the financial analysis of the company. The traditional approach of financial diagnosis, widely inspired by the concerns of bankers, the risk was perceived as a risk of insolvency. From this point of view the customer's financial analysis is divided into several stages: working capital cycle analysis; analysis of performance indicators; analysis of capital structure, indebtedness; liquidity analysis.

In the area of risk in lending, financial analysis was focused mainly on critical assessment of credit records, ran from a banking point of view. Its analytical scheme could be therefore summarized to two basic points:

- companies address to banks or other financial institutions a credit application, in general conditions of excess of demand over supply;
- financial diagnosis should allow the selection of applications, eliminating those with very high probability of non-recovery (i.e. those with high risk) and thus making the adjustment between demand and credit offer.

As in the financial theory is prevalent the concept which defines risk through the variability of results and increasing instability of company's performance, now found worldwide, it can not remain unexplained, financial analysis has widen the risk concept linking it first to the notion of financial flexibility, namely the ability of companies to adapt financially to environmental change. This is because the risk is seen now by the outcome variability, variability that is better controlled by the company as it has a high degree of flexibility.

The analysis (diagnosis) of risk perceived by the company can go along with the company capacity analysis to cope with this risk (i.e. the flexibility analysis), the two analyses are not totally identical; a true analysis of financial flexibility is needed more to a strategic diagnosis than a financial one. Secondly, broadening the concept of risk of financial analysis was done by deepening companies' difficulties study and by the more elaborate analysis of the risk of bankruptcy. Financial diagnosis received these new tools in its efforts, aspect reflected by the use of the notions: "financial leverage effect", "operating leverage effect", "scores" or "ranks". The rank consists in grading or classifying securities, being subject to transactions on a capital market, using a synthetic indicator in the study of results and cash flows that generate problems to the companies and bankruptcy risk analysis.

Even though statistically it was found that the frequency of strictly financial difficulties is limited, financial analysis comes with important contributions in studying and treating the companies' difficulties as all causes of degradation ultimately have a direct impact on performance or financial position.

Traditional contributions of financial analysis to detect "risk businesses" are related to the use of its instruments: balances, rates, flow panels, etc. The multitude of indicators provided by these tools has made necessary the search for global notation (SCOR), allowing taking into account only significant indicators and highlighting the interdependences of different features that they translate. One can thus achieve empirical or statistical risk detection.

Credibility represents the material and moral support, the essential element without which a credit may not be granted. Gaining trust requires knowing the customer which is produced by an activity of analysis and documentation, so that an assessment as close to the real asset and financial situation is done, recognition of manufactured products and services, relationships with partners, professionalism of management. When lending, the bank takes a credit risk, reduced by a careful evaluation of the borrowers, establishing exposure limits and implementing a prudent provisioning policy when there is danger of loss.

Investigation of customer activity in order to know him is pursued and completed by the analysis of creditworthiness, which allows on the one hand reducing the credit risk and on the other hand establishing an image of the client and the uncertainty degree incurred by the bank in order to make the decision to continue the customer's analysis for credit approval.

The risk of the requested loan default is generated by:

- borrower's inability to generate adequate cash flows as a result of adverse events in business activity due to economic and political environment;
- uncertainty about future value and quality, the liquidity degree and the market value of debtor's collateral materials;
- borrower's business deterioration.

For this, through the financial analysis the bank seeks to identify and quantify the risk of client's performance, liquidity risk and the risk of capital structure and financing. Customer creditworthiness is ascertained using the indicators that define it and express his ability to pay his obligations about to assume by signing the credit agreement. Bankruptcy risk analysis can be achieved using some methods, which in terms of the form of the link between phenomenon (the company's solvency) and its influence factors can be grouped in my opinion into four categories (Fig. no.1) (management methods, economic methods, statistical methods and banking methods), which will be discussed below.

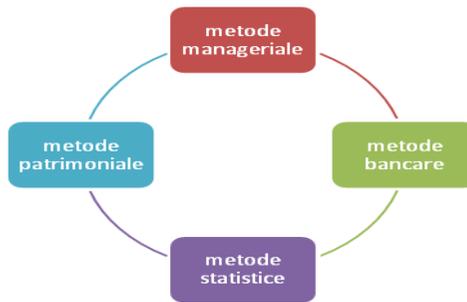


Figure no.1 Methods of analyzing the bankruptcy risk

Professor Robertson identified four elements that produce changes in the firm's financial health, namely: market stability, lower profits, lower working capital, and loan growth. Professor Robertson scoring function is as follows:

$$Z = 3,0 X1 + 3,0 X2 + 0,6 X3 + 0,3 X4 + 0,3 X5$$

in which:

$$X1 = \frac{(Turnover - TotalAssets)}{Turnover}$$

$$X2 = \frac{GrossResult.of.the.Financial.Exercise}{Total.Assets}$$

$$X3 = \frac{Current.Assets - Total.Liabilitie\ s}{Total.Liabilitie\ s}$$

$$X4 = \frac{Equity - Loans}{Total.Liabilitie\ s}$$

$$X5 = \frac{Liquid\ assets - Overdraft}{Loans}$$

Z function aims to the changes that occur in the firm's financial situation from one period to another. If the Z score depreciates by 40% or more than 40% in one year, automatically the analysis should identify the causes of Z score reduction. If the score is 40% or over 40% in two consecutive years, then the company cannot survive because of its financial instability.

An alternative to the scoring method, practiced in particular by banks is "normative comparison", the creditworthiness of traders who use credit, which is shown below (Stănescu, Ișfănescu and Băicuși 1996: 250).

Table no. 1 Robertson Model applied to Romanian IT companies

Lei

Romania		Accomplished 31.12.2005	Accomplished 31.12.2006	Accomplished 31.12.2007	Accomplished 31.12.2008	Accomplished 31.12.2009	
Turnover-total assets		- 7 624 111	- 5 047 945	- 12 558 790	21 689 617	- 13 663 574	
Turnover		140 229 348	132 240 400	108 031 499	157 175 823	115 939 144	
1)	X1	-0.05	-0.04	-0.12	0.14	-0.12	
	X1 Variable	3	-0.87	-0.61	-1.86	2.21	-1.89
Gross Result of the Financial Exercise		28 726 444	55 740 758	60 162 886	62 475 813	58 384 878	
Total Assets		147 853 459	137 288 345	120 590 289	135 486 206	129 602 718	
2)	X2	0.19	0.41	0.50	0.46	0.45	
	X2 Variable	3	0.57	1.23	1.50	1.38	1.35
Current Assets-Total Liabilities		3 546 223	- 2 432 872	- 1 242 828	11 662 140	8 257 559	
Total Liabilities		140 229 348	132 240 400	108 031 499	157 175 823	115 939 144	
3)	X3	0.03	-0.02	-0.01	0.07	0.07	
	X3 Variable	0.6	0.02	-0.01	-0.01	0.04	0.04
Equity-Loans		65 201 453	59 890 440	65 303 125	77 807 369	82 598 422	
Total Liabilities		140 229 348	132 240 400	108 031 499	157 175 823	115 939 144	
4)	X4	0.46	0.45	0.60	0.50	0.71	
	X4 Variable	0,3	0.14	0.14	0.18	0.15	0.21
Liquid Assets –Bank Overdraft		63 040 644	56 389 075	39 236 476	45 743 659	40 783 983	
Loans		4 959 388	2 858 135	2 063 490	2 571 055	2 879 304	
5)	X5	12.71	19.73	19.01	17.79	14.16	
	X5 Variable	0,3	3.81	5.92	5.70	5.34	4.25
"Z" SCORE VALUE		3.67	6.66	5.52	9.12	3.97	
			182%	83%	165%	44%	

Source: Author's calculation.

The data analysis shows that except for 2009, IT companies in Romania have not had financial problems.

3. Causes of Bankruptcy

The causes generating difficulty for the company have different origins. From statistical studies done over longer periods of time was found that about 51% of the causes generating bankruptcy are those from socio-economic and competitive environment in which the company works:

- increasing national and international competition;
- emergence of substitute products;
- loss of a major customer or his bankruptcy;
- bankruptcy of an important supplier that provides certain materials, parts, components essential for the continuation of the company's work;
- bankruptcy of a bank with which the company had prevailed relationships;
- the emergence of more stringent regulations on safety line and environmental protection;
- continuous drop in the stock market quotation for listed companies.

In another order of ideas one should also consider domestic nature causes which led to at least half of the bankruptcies according to statistics. These causes are overwhelmingly related to poor management:

- stock and customer rotation lower than the rules of the sector;
- the practice of lower margin than similar businesses;
- repeated losses from operations;

- inability of credit renewal.

An attempt to systematize the many causes generating difficulty states or even bankruptcy may take into account the following grouping criteria:

a. Causes related to the reduction of activity:

- the downward trend in demand for products made by the company;
- loss of key customers;
- declining competitiveness of the company's products;
- low degree of renewal of products, respectively adapting to needs;
- conjectural decrease in demand;
- enhanced national and international competition;
- bankruptcy of major suppliers.

b. Cases related to reducing margins and profitability:

- inadequate strategic decisions;
- selling price rigidity;
- too high staff costs;
- the existence of fixed assets technically obsolete;
- the large share of financial charges;
- unexpected increases in raw material prices.

c. Specific cases related to company's treasury:

- difficulties in getting loans to finance;
- long term stock rotation;
- term extension of clients' credit;
- term reduction of supplier's loan

d. Specific causes to the management system:

- managers' inadequate training and inability to adapt to new market conditions;
- misunderstandings between members of management;
- poor analytical accounting and failing to recognize the full cost;
- lack of substitutes for current leaders;
- excessive compensation of managers.

e. Accidental causes:

- misappropriation of funds;
- natural disasters;
- internal social problems.

From the above mentioned factors, it can be concluded that among the causes of bankruptcy the following prevail:

- *poor management*, which seems to be the basis of over 50% of all bankruptcies. Key management errors are: bad financial advice, lack of communication with employees, loss of control over costs, inadequate marketing policies, production overcapacity etc.
- *internal problems*: unskilled labor, loss of important projects, image degradation, fraud, waste above the maximum allowed level;
- *external factors*: competition, company's life cycle; it is known that all products, services and even companies have a limited life; economic recession, disasters etc.

4. Conclusions

Bankruptcy risk and investor presents interest both to an investor and to a company's manager. Many researchers and financial institutions were and are concerned with developing *a method for predicting the risk of bankruptcy* starting from a group of rates closely related with companies' health or weakness. This is why many researchers found that measuring bankruptcy risk can be established through an empirical function which allows estimating the probability for a company to record losses and therefore be unable to honor its obligations to customers and to the banks which provided loans.

The main hypothesis of the classical fundamental analysis is to continue the company's future activity. When this probability to continue the activity falls significantly, investors are interested in estimating it in order to mitigate potential losses.

It seems absurd considering the bankruptcy of companies listed on the stock market, as it's generally known that the stringent criteria for admission to be listed on the stock market, regarding certain high levels of profitability and capitalization over the last 2-3 years, allow listing on the capital market only to very competitive and with a strong financial position companies.

But famous cases of sudden bankruptcy of companies listed on international capital markets is no longer news to investors. Thus, rapid degradation of financial performance, coupled with managers' talent to "cover up" the actual results of listed companies, have imposed the need to elaborate some models of quick prediction of their success or failure.

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EMPIRICAL STUDY OF THE PROBABILITY OF DEFAULT IN CASE OF ROMANIAN COMPANIES LISTED ON STOCK EXCHANGE

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The importance of estimation of a firm's probability of default increased significantly during the economic and financial crisis for financial institutions, which can be explained by the fact that the share of nonperforming loans increased in this period. The probability of default can be estimated with structural models, which have on base the methodology developed by Merton (1974), methodology used by Moody's Corporation (known as KMV Merton model).

The aim of this study is to estimate the probability of default of companies listed on Bucharest Stock Exchange using this methodology.

This approach was widely used in the literature by many researchers (i.e., Kealhofer and Kurbat (2000), Crosbie and Bohn (2002), Duffie and Wang (2004), Bharath and Shumway (2004, 2008)). In Romania this methodology was empirically tested by Codirlaşu (2007), who estimated using Merton's methodology the probability of default of companies listed on the Bucharest Stock Exchange, respectively by Bobircă et al. (2008), where the probabilities of default were estimated in case of 42 companies listed on the Bucharest Stock Exchange for 2000-2008 time period.

In this paper we used Merton's model, which assumes that a company defaults if the value of its assets is less than the promised debt repayment at time T . The process of estimating the probability of default starts from the following firm specific variables: the market value of the firm's assets, the share prices, the value of the liabilities and the risk-free rate. The analyzed period is 2003-2010, containing the economic and financial crisis period, too. Analyzing the financial statements of the companies listed on the Bucharest Stock Exchange, we determined the input parameters of the model and calculated the quarterly probabilities of default of each analyzed company. According to our results the probabilities of default have a reduced value in the majority of the cases.

Keywords: Merton model, probability of default, credit risk, structural models, companies listed on the stock exchange.

JEL codes: G12, G17, G32, G33

I. Introduction

The importance of estimation of a firm's probability of default increased significantly during the economic and financial crisis for financial institutions, which can be explained by the fact that the share of nonperforming loans increased in this period. Nowadays, the question for the credit institutions and investors is not about to use statistic forecasting methods to estimate the default risk or not, it's rather about which method should be chosen. The purpose of this paper is to

estimate the probability of default in case of companies listed on the Bucharest Stock Exchange by using the Merton model, which is often used in the literature. This method can determine the probability that in subsequent period company will go bankrupt or not, based on the financial statements of each company. The Merton model prices the companies' assets and liabilities according to the theory of options. According to this model, a company goes bankrupt when the value of its liabilities exceeds the market value of its assets. The indicators used in the model are the market value of the assets, the share prices, the value of the liabilities and the risk-free rate. The investigated period is 2003-2010.

II. Literature review

The methodology developed by Merton was widely used in the literature by many researchers (for example Kealhofer and Kurbat (2000), Crosbie and Bohn (2002), Duffie and Wang (2004), Bharath and Shumway (2004, 2008)).

Duffie and Wang (2004) showed that the KMV Merton model can be used for the estimation of probability of default having a good predictive power. Tudela and Young (2003) investigated the probability of default (PD) of the companies from United Kingdom by using the Merton model. After the estimation of the probabilities of default the companies were divided into groups of defaulting and non-defaulting companies. An estimation of probability of default for the group of non-default companies was also made, with the purpose of controlling. To evaluate the results of the estimation made by the Merton model in relation with the companies' accounting information Probit-regression was used.

Erken (2008) studied that the Merton model is valid for the Dutch companies. He examined the KPN Company, which is the biggest Dutch company. The year 2000 was very instable for the firm, this way the examined period is from January 1st 2000 till December 31st 2000. The purpose is to show how this unfortunate year is reflected in the Merton model. The variables as financial information used in the model are the value of the firm namely the market value of the assets, the liabilities from the balance sheet, the risk free rate. Three steps were necessary to determine the probability of default: the estimation of the value of assets and volatility of assets, which was made by the Black-Scholes model, the calculation of the distance to default and the estimation of the probability default. Based on the case study and empirical research of KPN, as the result of the paper was established that the Merton model is appropriate for the estimation of the KPN company's probability of default, because in the examined unfortunate period the PD was 28.7%, while the volatility of assets 49.83%.

In Romania the model was tested empirically by Codirlasu (2007), who examined the probability of default (PD) for companies listed on the Bucharest Stock Exchange using the Merton model and its extension. The author analyzes 7 listed companies, and 5 investment funds between 1998 and 2006. As a conclusion he established that investment funds have the lowest (near zero) probability of default because of their diversified portfolios. From the companies, the SNP Petrom had the lowest PD, while the Oltchim had the highest PD between 2001 and 2004.

Bobircă et al. (2008) examined the probability of default for 42 companies listed on the stock market in the period of 2000 to 2008 by using Merton model. The results of their analysis show that nearly 20% of examined companies have probability of bankruptcy close to zero during the examined period, while the another 20% of companies have default probability of 50%. Between the two extreme values there were only a few companies.

III. Methodology

Merton in 1974 developed a model which prices the credits and liabilities of a company according to the theory of options.

Taking a company which finances the bought of (risky) assets (V) from two sources: the equity (E) granted by the shareholders and issuing a zero coupon bond (the nominal value of it is F , the maturity T and the market value B). The company is exposed to credit risk because of the loan, which means that in the moment T the value of the assets (V_T) is less than the nominal value of the liabilities (F).

The credit risk is present till the probability of default of the company is greater than zero (i.e., $P(V_T < F)$). In conclusion, at moment t_0 , we have that $B_0 < F \cdot e^{-rT}$, namely the yield of bond (y_T) is bigger than the risk free rate (r), furthermore the spread (π), a compensation for the assumption if the risk of the owners of the bond, can be stated as:

$$\pi = y_T - r.$$

If in the market there are no frictions, transaction expenses or expenses that appear if the company defaults, then the market value of the company's asset is equal with the sum of the equity and the value of the loan, that is:

$$V_0 = E_0 + B_0.$$

As a conclusion, the credit risk is the function of the company's financial structure:

- the leverage ratio, $LR = \frac{F \cdot e^{-rT}}{V_0}$;

- the volatility of the asset yield, σ_V ;

- the maturity of liabilities, T .

The basic idea of Merton (1974) is that if at moment T we have that $V_T < F$, then the company defaults and the value of its equity is 0. While if at moment T we have that $V_T > F$, then the firm is able to pay its liabilities and its capital values ($V_T - F$). Thus, at moment T the value of this company's capital is:

$$E_T = \max(V_T - F, 0).$$

Consequently, the value of a company's capital (E_t) can be seen as a call option on the market value of the firm's assets (V_t) and the trading price (F). So, E_t can be written as the following function $E_t = f(V_t, F, \sigma_V, r, T - t)$.

Using Black-Scholes's (1973) option pricing formula we get:

$$E_0 = V_0 \cdot N(d_1) - F \cdot e^{-rT} \cdot N(d_2),$$

where

$$d_1 = \frac{\ln \frac{V_0}{F} + \left(r + \frac{\sigma_V^2}{2} \right) \cdot T}{\sigma_V \cdot \sqrt{T}},$$

$$d_2 = d_1 - \sigma_V \cdot T.$$

The market value of the loan is $V_0 - E_0$.

The probability that a company goes bankrupt is $N(-d_2)$, and for the calculation of this, it is necessary to calculate the V_0 and σ_0 , but they are not directly observed. For companies that are listed on the stock exchange the value of the equity (E_0) can be estimated. Using Ito's lemma the equity volatility can be calculated:

$$\sigma_E \cdot E_0 = N(d_1) \cdot \sigma_V \cdot V_0.$$

Building a two-equation system on these relationships, we can estimate the values of V_0 and σ_0 .

IV. Main results

Our research includes 21 companies listed on the Bucharest Stock Exchange. We selected those companies, which have fulfilled our predefined criteria for liquidity. Under the liquidity criterion a company was analyzed, if the company's the annual number of transactions exceeded the 0.5% threshold for the total annual transactions of listed companies. The following companies were included in our sample:

- Financial intermediaries: SIF1, SIF2, SIF3, SIF4, SIF5, BRK.
- Extractive industry: SNP, DAFR, PTR.
- Processing industry: AMO, AZO, OLT, ATB, BIO, ALR, EPT, CMP, -TBM, RRC.
- Heat and electric energy: TEL.
- Transport and storage: OIL.

We collected the data of these companies for the period of 2003. IV. – 2010. III. The input data are the followings:

- accounting value of the assets of the company;
- accounting value of the company's short / long-term obligations;
- market value of the company's capital, which is calculated as the product of the value of issued shares by the company and the market price of shares;
- volatility of the annual stock price (as a proxy variable for the market value of equity), which is based on the calculation of the $\sigma \cdot \sqrt{t}$ formula, where the daily volatility is σ and the number of days(250) is t ;
- average of the monetary market rate as a proxy variable for risk-free rate.

In order to determine the probability of default, it is necessary for a hypothesis regarding the volatility of the assets of the company. We assumed that this value ranks between 20% and 40%. The model was estimated using the Matlab program.

Appendix 1 summarizes the results of Merton model, the probabilities of default of the 6 companies operating as financial intermediaries. It can be seen that the values are very low, almost 0 %. Higher values may be noticed only in the case of the BRK Company in the first three quarters of 2005, but it can be seen that the following periods have more reduced probabilities of the default.

In *Appendix 2* we summarized the results of the Merton model estimation of 5 companies, which carry out their activities in the following 3 areas of activity: extractive industry, heat and electric energy, transport and storage. It can be seen that the values in many cases remains low, which means that it is almost 0% the probability that any of the companies defaults next year. We can observe a few higher values of estimated probabilities, which mean that the probability for a company to become insolvent in the subsequent period is higher.

The *Appendix 3* contains the results of the Merton model regarding the probabilities of default of some of the companies operating in manufacturing sector. We can observe that the values can vary from a minimum value of 0.00% to a maximum value 95.87%. The high values can also indicate that the share price of the company dropped considerably in the examined period.

V. Conclusions

In this article we analyzed the probability of default of 21 companies listed on the Bucharest Stock Exchange, using the Merton methodology in 2003-2010 time periods. The results show that this methodology can be used for the estimation of probability of default in case of Romanian listed companies. Our results are in accordance with the earlier studies. The estimated probabilities of default are higher in the economic and financial crisis period. As further research can be concern the comparison of the prediction power of the structural models with other

models used for the estimation of the probability of default (such as: discriminant analyses, logit regression, neural networks) in case of Romanian companies.

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VII. Appendices

Appendix I: Annual probability of default in case of companies with the following stock symbols SIF1, SIF2, SIF3, SIF4, SIF5

	SIF1	SIF2	SIF3	SIF4	SIF5
2003 Q1	0,00%	0,00%	5,31%	0,00%	4,23%
2003 Q2	0,00%	0,00%	3,27%	0,00%	3,76%
2003 Q3	0,00%	0,00%	4,53%	0,00%	4,06%
2003 Q4	0,00%	0,00%	3,27%	0,00%	3,15%
2004 Q1	0,00%	0,00%	2,38%	0,00%	0,00%
2004 Q2	0,00%	0,00%	0,00%	0,00%	0,00%

	SIF1	SIF2	SIF3	SIF4	SIF5
2004 Q3	0,00%	0,00%	1,07%	0,00%	0,00%
2004 Q4	0,00%	0,00%	0,00%	0,00%	0,00%
2005 Q1	0,00%	0,00%	0,00%	0,00%	0,00%
2005 Q2	0,00%	0,00%	0,00%	0,00%	0,00%
2005 Q3	0,00%	0,00%	0,00%	0,00%	0,00%
2005 Q4	0,00%	0,00%	0,00%	0,00%	0,00%
2006 Q1	0,00%	0,00%	0,00%	0,00%	0,00%
2006 Q2	0,00%	0,00%	0,00%	0,00%	8,28%
2006 Q3	0,00%	0,00%	0,00%	0,00%	0,00%
2006 Q4	0,00%	0,00%	0,00%	0,00%	0,00%
2007 Q1	0,00%	0,00%	0,00%	0,00%	0,00%
2007 Q2	0,00%	0,00%	0,00%	0,00%	0,08%
2007 Q3	0,00%	0,00%	0,00%	0,00%	0,00%
2007 Q4	0,00%	0,00%	0,00%	0,00%	0,00%
2008 Q1	0,00%	0,00%	0,00%	0,00%	0,00%
2008 Q2	0,00%	0,00%	0,00%	0,00%	0,00%
2008 Q3	0,00%	0,00%	0,00%	0,00%	0,00%
2008 Q4	0,00%	0,00%	0,00%	0,00%	0,00%
2009 Q1	2,06%	0,00%	0,00%	0,00%	0,00%
2009 Q2	0,00%	0,00%	1,12%	0,00%	1,09%
2009 Q3	0,00%	0,00%	0,00%	0,00%	0,00%
2009 Q4	0,00%	0,00%	0,00%	0,00%	0,00%
2010 Q1	0,00%	0,00%	0,00%	0,00%	0,00%
2010 Q2	0,00%	0,00%	0,00%	7,02%	1,11%
2010 Q3	0,00%	0,00%	0,00%	0,00%	0,00%

Source: own calculations in Matlab

Appendix 2: Annual probability of default in case of companies with the following stock symbols *SNP, DAFR, PTR, OIL, TEL*

	SNP	DAFR	PTR	OIL	TEL
2004 Q1	0,08%	0,00%	34,57%	25,26%	
2004 Q2	0,00%	0,00%	45,54%	0,00%	
2004 Q3	0,00%	0,00%	46,48%	0,00%	0,00%
2004 Q4	0,00%	32,27%	42,49%	0,00%	0,00%
2005 Q1	0,00%	0,00%	33,93%	0,00%	0,00%
2005 Q2	0,00%	14,24%	34,95%	0,00%	0,00%
2005 Q3	0,00%	0,00%	23,25%	0,00%	0,00%
2005 Q4	0,00%	9,27%	28,15%	0,00%	0,00%
2006 Q1	0,00%	0,00%	25,02%	0,00%	0,00%
2006 Q2	0,00%	18,45%	0,00%	0,00%	0,00%

	SNP	DAFR	PTR	OIL	TEL
2006 Q3	0,00%	0,00%	0,00%	0,00%	0,00%
2006 Q4	0,00%	6,75%	0,00%	0,00%	0,00%
2007 Q1	0,00%	0,00%	0,00%	0,00%	0,00%
2007 Q2	0,00%	7,28%	0,00%	0,00%	0,00%
2007 Q3	0,00%	0,00%	0,00%	0,00%	0,00%
2007 Q4	0,00%	1,11%	0,00%	0,00%	0,00%
2008 Q1	0,00%	1,88%	0,00%	0,00%	0,00%
2008 Q2	0,00%	2,14%	0,00%	0,00%	0,00%
2008 Q3	0,00%	3,86%	0,00%	0,00%	0,00%
2008 Q4	0,07%	18,75%	0,00%	12,25%	0,00%
2009 Q1	0,08%	26,47%	0,00%	59,61%	0,00%
2009 Q2	0,05%	30,30%	0,00%	0,00%	0,00%
2009 Q3	0,05%	5,25%	0,00%	0,00%	0,00%
2009 Q4	0,05%	6,10%	0,00%	0,00%	0,00%
2010 Q1	0,00%	3,89%	0,00%	0,00%	0,00%
2010 Q2	0,05%	5,31%	0,00%	0,00%	0,00%
2010 Q3	0,00%	5,07%	0,00%	0,00%	0,00%

Source: own calculations in Matlab

Appendix 3: Annual probability of default in case of companies with the following stock symbols AMO, AZO, OLT, ATB, BIO

	AMO	AZO	OLT	ATB	BIO
2003 Q1	75,24%				
2003 Q2	22,67%				
2003 Q3	12,08%				
2003 Q4	8,71%				
2004 Q1	10,71%	4,01%	65,49%	6,08%	
2004 Q2	16,22%	3,39%	59,63%	5,93%	
2004 Q3	6,38%	3,85%	49,27%	4,29%	
2004 Q4	6,93%	3,20%	79,16%	3,15%	
2005 Q1	5,09%	5,29%	63,30%	0,00%	
2005 Q2	9,98%	6,98%	55,27%	0,00%	
2005 Q3	7,70%	3,50%	0,41%	0,00%	
2005 Q4	9,96%	6,37%	0,41%	0,00%	0,00%
2006 Q1	12,34%	6,31%	0,38%	0,00%	0,00%
2006 Q2	16,17%	6,02%	0,36%	0,00%	0,00%
2006 Q3	8,15%	6,29%	0,47%	0,00%	0,00%
2006 Q4	6,58%	7,53%	0,46%	0,00%	0,00%
2007 Q1	8,88%	6,04%	0,56%	0,00%	0,00%

	AMO	AZO	OLT	ATB	BIO
2007 Q2	7,48%	6,07%	0,22%	0,00%	0,00%
2007 Q3	15,60%	8,07%	0,17%	0,00%	0,00%
2007 Q4	83,69%	5,41%	56,13%	0,00%	0,00%
2008 Q1	90,12%	6,28%	43,27%	0,00%	0,00%
2008 Q2	30,14%	1,64%	41,27%	0,00%	0,00%
2008 Q3	89,57%	2,58%	38,75%	0,00%	0,00%
2008 Q4	32,20%	7,04%	35,68%	3,35%	0,00%
2009 Q1	18,92%	5,65%	33,27%	3,04%	0,00%
2009 Q2	31,51%	4,17%	30,23%	2,32%	0,00%
2009 Q3	33,68%	3,36%	27,55%	0,00%	0,00%
2009 Q4	0,00%	3,76%	25,16%	1,99%	0,00%
2010 Q1	0,00%	3,59%	45,56%	2,18%	0,00%
2010 Q2	1,11%	3,52%	24,23%	3,60%	0,00%
2010 Q3	0,00%	2,28%	16,26%	3,19%	0,00%

Source: own calculations in Matlab

Appendix 4: Annual probability of default in case of companies with the following stock symbols ALR, EPT, CMP, TBM, RRC

	ALR	EPT	CMP	TBM	RRC
2004 Q1	0,00%	35,51%	20,70%	0,00%	
2004 Q2	0,00%	43,44%	13,00%	22,65%	
2004 Q3	0,00%	35,26%	0,00%	0,49%	
2004 Q4	0,13%	16,62%	5,35%	0,00%	
2005 Q1	0,61%	57,61%	8,01%	84,22%	0,59%
2005 Q2	0,55%	18,03%	8,23%	95,87%	0,61%
2005 Q3	0,41%	69,83%	9,65%	91,27%	0,35%
2005 Q4	0,00%	31,25%	7,33%	80,61%	0,30%
2006 Q1	0,00%	15,87%	5,48%	74,33%	0,35%
2006 Q2	0,00%	24,82%	4,54%	0,00%	0,24%
2006 Q3	0,00%	68,63%	3,64%	0,00%	0,24%
2006 Q4	0,00%	75,49%	4,17%	0,00%	0,29%
2007 Q1	0,00%	51,87%	3,85%	0,00%	0,45%
2007 Q2	0,08%	3,03%	2,74%	0,00%	0,29%
2007 Q3	3,35%	4,01%	1,87%	0,00%	0,35%
2007 Q4	0,00%	6,46%	1,54%	0,00%	0,28%
2008 Q1	0,03%	8,01%	2,46%	3,46%	0,30%
2008 Q2	0,03%	49,43%	2,92%	4,14%	0,25%
2008 Q3	0,00%	36,55%	5,63%	15,29%	0,24%
2008 Q4	0,60%	76,48%	9,16%	22,02%	0,41%
2009 Q1	0,57%	17,13%	16,27%	19,29%	0,58%

	ALR	EPT	CMP	TBM	RRC
2009 Q2	0,48%	48,38%	19,36%	21,52%	0,71%
2009 Q3	0,32%	64,03%	6,90%	19,68%	19,84%
2009 Q4	0,32%	64,44%	9,10%	26,17%	11,27%
2010 Q1	0,00%	62,10%	6,65%	12,79%	0,69%
2010 Q2	0,37%	71,89%	7,96%	21,96%	0,51%
2010 Q3	0,37%	68,33%	6,29%	23,13%	0,41%

Source: own calculations in Matlab

THE IMPLICATIONS OF VARYING EXCHANGE RATES FOR THE INTERNATIONAL TRADE

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The benefit of international trade is a more efficient employment of the productive forces of the world.

(John Stuart Mill)

The exchange rate is a primary factor that influences economy. This instrument is used by some countries in order to improve the lack of balance caused as a result of the financial crisis felt in many countries considered by then infallible. The negative effects of the financial crisis can also be found in the decreased volume of commodities involved in international trade exchanges, as a consequence of modified prices and decreased offer. The globalizing trend leads to a constant expansion of exchanges between countries and to the consolidation of international cooperation. Except that economic interdependence generates an increased risk under the influence of economic, financial, monetary or political factors. The currency risk can generate either a gain or loss during foreign trade operations. The long period of RON depreciation made possible the entry of Romanian products on the international markets due to their prices. Sheltered by the gain generated by the evolution of the exchange rate, most of the exporters were not concerned by the increase of product competitiveness or by avoiding the currency risk. The fact that, for many years, the evolution of the exchange rate generated substantial losses for the exporters shows that risk coverage in Romania is, in most cases, a purely theoretical concept.

Key words: exchange rate, currency, depreciation, appreciation, J Curve.

Jel Clasification: F31, G15

1. The depreciation and its effect on the international trade exchanges

Generally, by depreciation we understand any decrease of the exchange rate on the currency market. Taking this into consideration, a clear differentiation has to be made between two different circumstances:

- one in which the depreciation phenomenon manifests itself unintentionally, involuntarily or, in other words, without acting in an administrative manner towards deliberate depreciation;
- the second situation, where the depreciation phenomenon is a direct consequence of some actions undertaken by the monetary authority itself in this regard, and which is a voluntary, deliberate depreciation by the monetary authority. As regards the first situation, depreciation can be caused by – as a main element – the lack of equilibrium of the balance of payments, meaning that the level of imports frontloads the level of exports as opposed to a previous time, an element that is usually combined with: the weak competitiveness of domestic products on foreign markets and the diminished purchasing power of the domestic currency caused by inflationary phenomena.

However, studies have been made and practice has shown that choosing voluntary currency depreciation can constitute a monetary policy for using the exchange rate in order to balance the country's trade balance. This monetary policy option was based on a scheme of set foreign exchange rates, especially where depreciation could be established through administrative means, but was also applicable in the case of exchange rate schemes with managed floating.

The monetary authority can act deliberately upon the national currency exchange rate by buying foreign currency, so as to determine an increase in the exchange rate compared to other currencies, and thus, a depreciation of the currency. The direct consequence is the stimulation of exports which, according to the new terms, become more attractive and, on the other side, the inhibition of imports which, although there might be demand, are more expensive, and as the importer's profit margins are getting thinner, it is possible that his activity will be performed at the limits of return of profit, thus causing him to give up.

Under these conditions, the impact of deliberate depreciation on international exchange becomes a way of shifting the demand for goods and services from one country to another instead of changing the international demand level. (Rădulescu Magdalena 2005:64):

internally, depreciation will move the demand from imported goods towards the domestic ones; externally, deliberate depreciation of an exporting country's national currency will move the demand of another importing country from the area of domestic goods to the one of imported goods, made by the first country.

In general, it has been noticed that, if a country depreciates its exchange rate, it will then succeed, in fact, in attracting a more significant amount of the international demand to its own products and, accordingly, the domestic production will be stimulated, since under the new conditions, it will have to adapt to a developing level of demand (the export component).

The national currency depreciation (Ghe. M. Voinea 2007: 99) stimulates the exports of that country because the exporters cash a higher amount in national currency and impedes imports, since the importers spend a higher amount in order to pay for the goods obtained on the external market. Also, the currency depreciation gives advantages to the debtor because they are paying their debts in a depreciated currency, and disadvantages the creditors because they collect the debts in a weaker currency.

A country depreciates its currency in order to improve the price competitiveness of the products made by its companies, so as to increase exports, to reduce imports and, therefore, to rebalance the external balance of payments.

The success of depreciation is not guaranteed because its immediate effects are negative. The positive effects are visible only when exports and imports are flexible enough in comparison with the costs, i.e. the volume of exports increases as the prices of exported goods on external markets are falling, and the volume of imports is falling as the prices of imported goods are increasing.

3. The “J curve” and the impact of depreciation

In economic theory, the effect of national currency depreciation is described based on the pattern of the “J curve”. So, the pattern was based on the regime of set rates, but can also be applied to the exchange rate scheme with managed floating. In both cases, a significant amount of foreign currency will be used as backup for the central bank interventions on the currency exchange market. This system is very expensive, but can affect net exports in the desired way by appreciation or depreciation of the national currency.

Paul Krugman and Richard Baldwin introduced the J curve in specialised theory (Krugman Paul, Baldwin Richard 1987:11-56). Their research uses data specific to the European and American economies and shows that a negative monetary shock reduces GDP for almost half a year, generating the currency appreciation for the same period. The trade balance achieves a surplus for one year and a half, followed by a trade deficit.

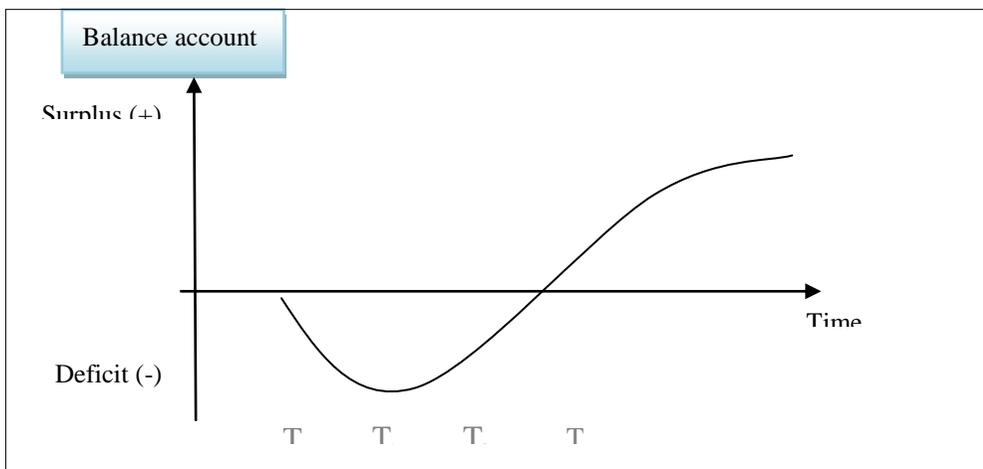
The J curve theory assumes that the positive effects of currency devaluation on the equilibrium of the foreign balance of payments is not visible immediately, but only after a certain a period of time. According to the J curve, if national currency depreciates, then imports rise due to the influence of import prices, even if the quality remains unchanged. In time, imports fall and exports rise, contributing to the equilibrium of the trade balance.

These positive effects can only exist under certain conditions (Ghe. M. Voinea 2007: 99), such as: increasing the competitiveness of goods, expanding trade relations with other partners, developing the production capacity for transport, the transfer of product offer from one market to another.

The pattern of the J curve underlines the fact that a deliberate decision for the depreciation of the national currency can stimulate exports so as to equilibrate the trade balance within certain limits, but the positive effect will occur with some delay.

The impact of national currency depreciation on the external balance of payments, when the positive effect does not occur immediately, is represented graphically as follows:

Chart no. 1: The effects of foreign currency depreciation in a “J curve”



Source: Ghe. M. Voinea - "Relații valutare-financiare internaționale", Ed. Universității "Al. I. Cuza" Iași, p.99

Therefore, *the immediate or the short-time effect of depreciation* (T_0 and T_1 moments) show the worsening of the balance of trade deficit due to the increase of imports as a consequence of the influence of import prices (the prices of foreign commodities in the national currency are higher), although, as regards quantity, there is no change. In this situation, the so-called *price-effect of depreciation* can be noticed.

In the next period (T_2 and T_3 moments), depreciation has positive effect on the trade balance because the country considerably reduces its imports as they are more expensive, and increases the exports, these being cheaper on foreign markets. In this situation, there is the so-called *volume-effect of depreciation* which progressively compensates and surpasses the price effect.

However, the national currency depreciation also has some negative effects:

the growth of inflation even if only through the growth of prices for imported products, which reflects on the prices of domestic products (imported inflation);

foreign currency inflows into the country (through exports) lead to increasing money supply and bank liquidities, which favour the growth of credit, lower rates, thus increasing domestic demand; although depreciation can improve the price competitiveness of products, it does not solve the structural competitiveness problems such as insufficient quality of products.

In order to limit those unfavourable effects, depreciation must be accompanied by programs of internal recovery of the economy which aim at reducing domestic demand, stopping the increase of nominal costs and stimulating exports.

Essentially, it must be underlined that deliberate national currency depreciation policy, which openly stated the aim of stimulating exports, and thus, rebalancing the balance of payments, can have temporarily unfavourable effects, and the efficiency of such a policy on a longer term is tightly connected to the determinant factor – economic competitiveness – in which productivity plays a crucial role.

As the depreciation of the currency does not stimulate the export increase and restricts and discourages imports that maintain or increase, the country finds itself in a “*vicious circle*”. Structural imbalances in the economy and consumptions larger than resources contribute to forming the vicious circle between depreciation and the lack of equilibrium in the balance of payments which extends through inflation.

Professor Anghel Rugină (Anghel Rugină 1992:67) considered that the depreciation of a currency cuts both ways. “On the one side, it appears that it would actually help increase exports and bring in foreign currency which would improve the international balance of payments. But in fact, shortly after, the situation turns around, and a new inflation wave stops the export increase and encourages imports, thus eliminating every advantage and, moreover, it generates budget deficiencies and unemployment”.

4. Currency appreciation and its impact on international economic exchange

The appreciation of a currency is the process of increasing the national currency’s value in comparison with other currencies. The cause of currency appreciation resides in the persistence of surplus in the balance of payments. This leads to the diminishing (cheapening) of prices on imported foreign commodities in the national market and the simultaneous increase of prices for internal commodities intended for export. Thus, the effects of the appreciation are the opposite of those of depreciation, and are in fact the stimulation of imports and discouragement of exports, which lead to a decrease in payment surplus in current operations.

Under the provisions of the IMF statute, the supervision of exchange rate formation and movement as well as reference currencies or the reference according to which the states establish their national currencies still fall under the competences of the International Monetary Fund.

In case of a repreciation of the national currency, a state’s monetary authority principally accepts it for two reasons, and those are:

an underrated currency generates inflationist pressures, on the one side due to the imbalance between the offer and the internal demand which induce an increase in exports (stimulated by the underrating of the national currency), and, on the other side, due to the increase of the internal monetary mass generated by capital inputs.

the country with a price competitiveness which seems too big for the trade partners is subject to international pressures for the repreciation of its national currency.

Contrary to the depreciation of the national currency, *the repreciation of the national currency impedes imports* (foreign products seem cheaper in the national market). The decrease of prices for imported products helps fight inflation.

On the short term, a considerable repreciation of the national currency deteriorates price competitiveness of national products, because these are expensive in the external markets. Thus, national companies are being forced to comply with a structural competitiveness (outside the price), through (Jacques, Généreux 1997:59):

improving the quality of products in order to attract customers less aware of the price;

a new specialisation concerning products for which the demand on the external market is less sensible to the selling price;

technical innovation or innovation in work management and production so that productivity would increase and the production costs would decrease; these will allow, in turn, to increase the profit without increasing prices or to maintain the profit when prices fall.

All three of the aspects mentioned above aim at consolidating the structural competitiveness of national products which would allow an increase of exports and, therefore, even up the external balance of payments or obtaining a surplus for the latter.

As far as the *appreciation of the national currency* is concerned, it limits exports because exporters cash a smaller amount in the national currency, and stimulates imports because importers spend a smaller amount in view of paying for the commodities purchased on the external market. The appreciation of the currency is a disadvantage for the debtors, because they pay their debts in a stronger currency, and an advantage for the lenders.

If the appreciation of the currency determines a moderate restriction of exports and a maintaining or an increase of imports within controllable limits, the balance of payments is kept in equilibrium and the country thus enters into a "*virtuous circle*".

The increased interdependence of international markets, the rush for resources and the increasing complexity of financial markets determined the emergence of new models and practices in international trade. In this context, Romania's place and role in the new global economical order has been determined by a series of events (primarily political) with a major impact on economic policies, especially on those related to international trade.

Romania's accession to the European Union on the 1st of January 2007 involved a succession of economical and political changes, having a direct impact on the foreign trade. This way, Romania had to withdraw itself from any kind of agreement outside the EU from which it was part, and from the application of the common legal framework of the EU for external trade relations, including for the common import trade scheme, this causing changes in the structure of the trade balance for each country (i.e. before 2007, the Republic of Moldova used to export products in Romania without customs duties; starting from 2007, the same customs duties that apply for a third country also apply for the Moldavian goods). Romania must also withdraw its list of commitments agreed with the World Trade Organisation, following the renegotiation, together with all the members of the enlarged EU (27 countries – including Romania and Bulgaria), of new agreements regarding economic and trade cooperation.

Romania's accession to the EU coincided with a period of economic growth without precedent (in 2008 the GDP grew by 7,1 %), the statistic data for 2008 showing that the share of trade in GDP was higher by 23,3% than that of industrial production (22,9%).

The global financial crisis progressively affected Romania beginning with the fourth trimester of 2008 (when there was a decrease in GDP), causing gloomy predictions concerning economic growth, taking into account a decrease of the real GDP in the second trimester of 2009 by 8,7% over the same period in 2008, according to the data published by the National Institute of Statistic (Press Release no. 168 of 01.09.2009). Data from 2010 reveal a shy growth in the second trimester, but no optimistic outlook regarding the official exit out of the recession.

Finally, in a regional and international context, redefining the trade relations with former important trade partners (the Russian Federation) should be mentioned, as statistic data show a constant worsening of Romania's trade deficit in relation to Russia, mainly because of energy imports. However, Russia remained a significant trade partner for Romania, being the second in place in 2007 in Romania's external trade (with countries outside the EU), and the main non-EU exporter in the Romanian market (also due to energy imports).

According to the data published by the Directorate for external trade, the year 2009 marked a very sudden decrease of trade exchanges with countries from the former soviet area, with over 45% in the first seven months, as opposed to the same period in 2008. Among the products exported to the Russian market, a significant amount is represented by automobile components, electrical devices, chemical industry products, glass and glass items.

Romania's external trade will increase by 15% in 2011 to 91 billion EUR, reaching 105 billion EUR in 2012, with an export rate maintained at 54%. Romania followed the pattern of

Central and Eastern Europe states as far as exports and imports are concerned, a phenomenon which also applies to its trade relationships, concentrated in the area of ten important partners, among which we find Germany, Italy, Poland and Russia.

The value of Romania's external trade has risen to 79 billion EUR in 2010, below the level registered in 2008 of 85 billion EUR, but with a 20% increase from 2009, when it had a total of 65 billion EUR.

The Romanian external trade will continue its positive development, reaching 91 billion EUR in 2011 and 105 billion EUR in 2012. Exports will cover 54% and imports 46%. The main countries in which Romania exported last year were Germany, Italy and France, and these partners are the same for imports.

The driving force of the Romanian external trade was the automobile industry, which covered 29% of the imports and 27% of the exports. The transportation and textile segments also had a positive development, while the chemical products sector registered the greatest deficit, covering 17% of the imports and 10% of the exports.

At a regional level, Romania is on the second place regarding the average annual growth of the external trade between 1999 and 2009, although the market share in Central and Eastern Europe was of 4%.

Conclusions:

Therefore, establishing an optimal level for the foreign exchange which would support exports, but also discourage imports, and allow maintaining equilibrium for the balance of payments is a very difficult undertaking. The choice between the policy of the strong currency as opposed to the weak one depends on a country's economic and social structures and on the degree of technical ability. Unless the production structures are adequate and the capacity of entering new markets consolidated, a strong currency policy cannot be achieved. This will lead to a loss of traditional markets, because business competitiveness will decrease, making companies less adaptable and less profitable.

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THE IMPACT OF FINANCIAL INNOVATION ON THE DEVELOPMENT OF THE CURRENT FINANCIAL SYSTEMS

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Over the past few decades, the financial innovation has become a defining characteristic of financial systems, contributing to the major structural changes underwent by international and domestic financial markets.

The aim of this paper is to analyse the contribution that financial innovation might have to two key issues in the financial system: its efficiency and its stability and to discuss the various ways in which financial innovation has the potential to enhance the efficiency of the financial system and also its implications for systemic stability.

In order to achieve this, the methodological approach used starts with a literature review which highlights the main academic literature on the subject. Then, in order to analyse the problems regarding the trade-off which often exists between the efficiency and stability characteristics of the financial system, we have used systematisation techniques and also a series of tables and graphics.

In general, the results of our paper highlight that there is a need for caution, because the abusively use of some new financial instruments on a larger scale or on a different background compared with the original one, without proper regulation and supervision, can generate instability. Also our paper emphasizes that there are relatively few studies undertaken on the subject of financial innovation, at both theoretical and empirical level, in comparison with the abundance of researches undertaken on the innovation from other sectors of the economy (e.g. industrial innovation). Thus, we consider that this research can represent an initial step towards the possibility of filling this gap, taking into consideration the importance of the financial innovation subject, that should be studied continually in order to improve its comprehension for the benefit of those who produce it, use it and eventually who regulate it.

Key words: financial innovation, financial system, financial stability, efficiency

JEL code classification: G01, G14, G15, G32

1. Introduction

The dynamic and development of the financial systems presents a real interest for both policy makers and participants from various financial markets, whether we are talking about investors, financial intermediaries or end-users of financial services. In the last decades, the main feature of the European financial sector has been represented by the financial integration process, the deepening of this process taken place in the light of certain profound structural changes emerged as a result of the manifestation of a series of complex processes and phenomena, among which it can be noted ***the process of financial innovation***. This process ***is influencing directly two key components of the financial sector, namely: its stability and efficiency***. Considering the characteristics of the financial sector, it can be seen that financial innovation has a strong influence exactly on the components that, the European Union, through the process of financial integration, is attempting to improve.

In this context, ***the purpose*** of this paper is represented by the study of the financial innovation and of its implications on the financial systems development, highlighting both the positive and negative effects that the financial innovation has on its efficiency and stability. Thus, taking into

consideration that all financial innovations encompass advantages as well as risks, ***the core question*** that arises refers to under what circumstances financial innovations enhance the efficiency and the stability of financial systems, and, under what circumstances do they threaten their stability?

In order to achieve this purpose the research is structured in ***five parts***: *the first part* contains introduction remarks regarding the field of research and the importance of the approached theme; *the second part* is dedicated to a literature review which identifies the main researches undertaken so far on this subject; *the third part* highlights the key role played by financial innovation in increasing the efficiency and the stability of the financial systems, and *the fourth part* of the paper reflects, mainly, the negative impact that the financial innovation may have, in certain circumstances, on the stability of the financial systems; while *part five* provides the concluding remarks of the research.

The ***methodological approach*** used starts with a literature review, which is useful because, on one side, it helped us to familiarise with the main studies from this field and, on the other hand, we were able to underline the way in which our research will cover the least approached areas of this field, especially the problems regarding the trade-off which often exists between the efficiency and stability characteristics of the financial system. As a method of data analysis we have used systematisation techniques and also a series of comparative tables and graphics. In order to obtain our data, we have used mediate techniques for data gathering, like official statistics of the Bank for International Settlements (BIS), different reports, studies and researches.

2. Financial innovation – a literature review

Financial innovation has been considered to be one of the major causes of the radical changes that took place in the financial systems, both at the national and international level, over the last decades. However, taking into consideration its' dynamic and complexity, even after a quarter of century, the academic literature has not reached a consensus regarding the concept of "*financial innovation*". Anyway, one of the most widely and frequently used definition is that offered by Frame and White (2004, p. 118), which after having analyzed the basic functions of the financial system, considered financial innovation as "something new that reduces costs, reduces risks, or provides an improved product/service/instrument that better satisfies participants' demands".

In general, it is considered that financial innovation has a direct effect on reducing the negative elements (such as costs and risks) as well as on increasing the positive ones (through development of products, services or instruments that would better meet market's needs). Hence, Van Horne (1985) highlights in his paper that a real financial innovation helps to increase market efficiency and completes the range of products and services. Also, Llewellyn (1992) argues that financial innovation refers to the creation of new financial instruments, techniques and markets as well as to the separation of different characteristics and risks of individual financial instruments, followed by their combination in various new ways. The author emphasizes also that the financial innovation helps to increase the overall efficiency of the financial system.

Considering this, financial innovation can be classified into the following two categories (Anderloni et al., 2009): *product innovation* - which leads to the emergence of new financial instruments, new types of contracts and new markets and *process innovation* - resulting the emergence of new financial techniques (e.g. new techniques of distributing securities, processing transactions or pricing transactions).

Summarizing, ***the researches undertaken so far regarding the subject of financial innovation are still in an early stage***, when compared with the abundance of researches undertaken on the innovation from other sectors of the economy (like the industrial innovation), and we can observe also a lack of systematic empirical researches with unique and unanimously accepted results. Thus, we consider that ***this research can represent a relevant response to this very important***

subject, that should be studied continuously in order to improve its comprehension for the benefit of those who produce it, use it and eventually who regulate it.

3. Financial innovation – key factor for the development of financial systems

The process of financial innovation is one of the key factors for the development of financial systems because it contributes to the achievement of five basic functions of a financial system: (1) it increases the variety of the financial spectrum by combining the characteristics of various financial instruments in order for the advantages of one instrument to alleviate the disadvantages of another; (2) it enables various types of risk to be more efficiently managed and shifted to those who have a greater ability and willingness to absorb risk; (3) it increases the liquidity of assets and markets; (4) it allocates funds to their most efficient use and (5) it may give investors access to new markets from which they were previously excluded. Based on these functions we consider that the *various forms of financial innovation* can be grouped as in Table no. 1.

Table no. 1 – The taxonomy of financial innovation

Types of financial innovation	Examples
■ Instruments/processes that ensure the transfer of price risk	Swaps, forward, futures and options contracts
■ Instruments/processes that ensure the transfer of credit risk	Securitisation, collateralized debt obligations - CDOs, credit default swaps - CDSs
■ Instruments/processes that allow the growth and development of firms and corporations	Bonds
■ Instruments/processes that contribute to the liquidity enhancement	Securitisation, Direct access trading (DAT)
■ Instruments/processes that ensure the financial services modernisation	ATMs, internet banking, Target 2 Securities
■ Instruments/processes that ensure the substitutability between different financial instruments	Debt equity swaps

Source: realised by the author

The scientific studies from the academic literature regarding the effects, both positive and negative, generated by the different types of financial innovation on the stability and efficiency of the financial systems are varied.

Thus, on the one hand, there are a series of studies that highlight how financial innovation help to increase the efficiency and stability of financial systems. In this respect, Greenspan (2004, p. 4) argued that: “credit derivatives and other complex financial instruments have contributed to the development of a far more flexible, efficient and hence resilient financial system”.

In general, the main benefits of the financial innovation (although not the only ones) regarding the increase of the financial sectors efficiency are related to **the possibility of innovative instruments to reduce the financial intermediation costs** (basically this can be achieved in two ways, either by facilitating borrowers the access to a wider range of financial markets which are providing additional lending facilities, or, in some cases, by creating the necessary conditions so that the financial institutions would be able to obtain scale economies which will reduce the costs of the services that they provide), **to enhance the liquidity** (e.g. CDOs enable banks to create liquidity based on their loans, which traditionally represent an illiquid component of their portfolio) **and, most important, to enable risks to be dispersed optimally throughout the financial system** (for instance, a bank could maintain a relationship with a client over an

extended period of time without incurring an excessive credit-risk exposure to the customer, in this respect, credit derivatives providing an attractive mechanism for managing risk exposure). However, we must take into account that one of the financial systems characteristics is represented by the trade-off which often exists between its efficiency and stability (more precisely, the impossibility to obtain them both at the same time). Extrapolating this situation, some analysts considered that this is true also in the case of financial innovation, particularly with respect to credit derivatives. In this context, **the impact of financial innovation on the financial system stability represents a controversial issue**. Thus, on the one side, because the financial innovation enables risks to be dispersed optimally throughout the financial system, it increases its stability, but, on the other side, because, in certain conditions, it allows the accumulation and proliferation of risks, it can have a deleterious impact on the financial system stability.

Hence, there are a number of ways through which financial innovation can enhance financial system stability, giving it a higher resistance to shocks:

- innovative instruments spread risks more widely within the financial system, in this way the risks being absorbed by those who are more willing and more able to deal with them, thus emphasizing the stabilizing role of financial innovation.

- in many respects, this type of instruments enable banks to respond more easily to certain types of shocks. Greenspan suggested that “[the stability that has characterized the financial systems until 2007] suggest a marked increase over the two or three decades in the ability of modern economies to absorb unanticipated shocks...this has doubtless been materially assisted by the recent financial innovations that have afforded lenders the opportunity to become considerably more diversified and borrowers to become far less dependent on specific institutions or markets for funds” (Greenspan, 2002, p. 6).

- another dimension to these issues is provided by the Bank for International Settlements, which considers that “The ability to switch smoothly between balance sheet financing and market-based financing contributes to the robustness of a financial system and improves its ability to deal with strain” (Knight, 2004, p. 6).

In conclusion, we can state that ***the benefits driven from the development and use of financial innovations are manifold***. Hence, the cost of financial intermediation may be reduced due to the use of financial innovations, offering the entities which seek financing the possibility to enter different markets and allowing different actors from these markets to effectively exploit their competitive advantages. Also, new instruments enable arbitrage between markets in different countries, which lead to the decrease of pricing anomalies, and implicitly to the reduction of market imperfections. Moreover, a number of financial instruments allows the use of diverse hedging options enabling the increase of protection vis-à-vis risk, while another series of innovative financial instruments facilitate the risk assessment, transferring it to those entities that are more capable to manage it efficiently. Nevertheless, these instruments enable different risks to be divided and then separately priced and “sold”. Thus, we can assert that if these processes are carried out in a correct and professional way, then these innovative financial instruments will have a direct effect of increasing the efficiency of resources’ allocation in the economy.

4. Controversies regarding the effects of financial innovation on the stability of financial systems

The manifestation of the financial crisis which started in 2007 highlighted the existence of a high number of opaque financial products in the international markets, such as: credit default swaps, mortgage-backed securities or collateralized debt obligations. The role that these financial products have had within the financial crisis has triggered a heated debate regarding the value that they bring to the international financial system as well as regarding which would be the correct response from the authorities in charge with the regulation and supervision of these

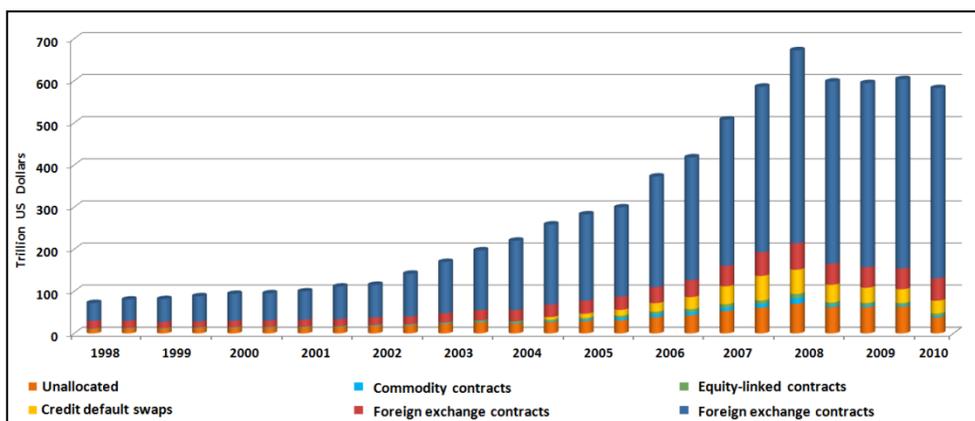
innovative instruments. It is already obvious that from the debate around this subject have emerged two streams of opinion, on the one hand, are those who believe that financial innovation is largely unnecessary (e.g. Krugman (2008): „It's hard to think of any major recent financial innovations that actually aided society, as opposed to being new, improved ways to blow bubbles, evade regulations and implement de facto Ponzi schemes”) and on the other hand are those who believe that financial innovation has both positive and negative parts (e.g. Levine (2010): „Even if the last few years demonstrate that financial innovations can be used as tools of economic destruction, the last few centuries demonstrate that financial innovation is crucial, indeed indispensable, for sustained economic growth and prosperity”).

Thus, there is the possibility that the financial instruments that should increase efficiency, instead, in certain circumstances, may threaten the financial stability. These instruments can as well increase or reduce financial stability, enabling these fluctuations to put into question the overall financial innovation capacity to generate financial stability. For instance, the credit derivatives (one of the most invoked examples of financial innovation over the last years), allow the banks to improve their image, similar to the process of "window dressing", but this arrangement could hide the reality (Stoica, 2010).

These considerations lead to a preliminary conclusion related to the implications of financial innovation on the stability of a modern financial system. It would seem that *the financial instruments that allow better dispersion of risk and that emphasize the role of markets in financial systems are also reducing the vulnerability of the financial systems to small shocks*, allowing a more effective management of these events. Hence, the capacity of financial systems to stabilize is enhanced by the financial innovation. On the other hand, *the financial innovation can lead to the exposure of financial systems to major and systemic shocks*, enabling the management of this type of shocks to be more difficult. An example in this respect may be represented by the systemic liquidity shock, generated by the decrease of the liquidity from the global financial markets, experienced in 2007. Thus, Rajan (2005, p. 16), for instance, concludes that: “[while] the financial system is more stable most of the time, we may also have the possibility of excessive instability in really bad times (as well as higher probability of such tail events)”.

Thus, despite the fact that the derivative products have been created to help dissipate the credit risk of the issuers, they hide a number of risks that have facilitated the emergence and expansion of the financial crisis. This was due to, on the one hand, the lack of transparency and the extremely high complexity of these financial instruments, and, on the other hand, the fact that many of the financial entities involved in the transactions with such type of financial instruments didn't fully understand the risks associated with these transactions.

Basically, *we can state that there was a tendency of proliferation of derivative instruments with a high degree of complexity and opacity, as well as of trading such instruments through certain financial entities equally opaque*, such as the so-called Structured Investment Vehicles (SIV). Thus, chart no. 1 highlights the proliferation of financial derivatives at the global level, the total value of the swap contracts on the interest rate and of the other types of derivatives reaching in 2008 the amount of 672 trillion dollars, equivalent to 11 times the global GDP, according to the estimations made by the Bank for International Settlements (2010). Just ten years previous, in 1998, the value of these financial derivatives was only 75 trillion dollars, equivalent to 2 ½ times the global GDP. Thus, the global derivatives market has simply exploded in the period 2007-2008, registering an annual increase of about 50%.



Source: realised by the author based on the data provided by the Bank for International Settlements (BIS) (<http://www.bis.org/statistics/otcder/dt1920a.csv>)

Chart no. 1 - The evolution of the total value of various types of financial derivatives issued in the period 1998 - 2010 at the global level (biannual values, trillion U.S.A. dollars)

The British Financial Services Authority argued that the manner in which financial intermediaries have used the associated financial entities, such as the SIVs, represented the main cause of the financial markets negative developments from the end of 2007. During that period, the liquidity of the securities market has mostly disappeared, after a period of several years during which there were significant increases in this market. The lack of liquidity has created major problems especially to certain types of financial derivatives, such as: collateralized debt obligations - CDOs or collateralized loan obligations – CLOs. In general, all the financial markets that have allowed the trading of such financial instruments have been hit hard by the financial crisis.

Despite the issues presented and the fact that the current financial crisis which started in 2007 has seriously affected the international financial system, the opinion of the economists and government representatives present at the G20 meetings in 2009 and 2010 was that the financial markets will continue to be interconnected and with a strong tendency of globalization, while the financial innovation will continue to play a key role in the process of economic development (G20, 2009a, p. 5). This vision is not only declarative, because the majority of the legislative changes made during this period within the G20 economies in order re-regulate the financial sector were taking into account these considerations. In this context, the president of the Financial Stability Council, Mario Draghi, stressed that regulations should not inhibit financial innovation, because it represents on the one hand the element that its needed in order provide to consumers diversified solutions of financing and on the other hand it's the element through which the lending process can be extended (Tonveronachi, 2010, p. 131).

Thus, we consider that the objectives of the re-regulation process should be represented by the strengthening of the financial system, without affecting the process of markets self-regulation and the process of financial innovation, because they represent some of the main advantages offered by this sector.

Also, we can say that ***the fragility of the financial systems is not given by the widespread use of innovative financial products, but rather by the excesses of the financial markets***, excesses that the regulations in force and the existing supervisory systems were not able or did not wanted to inhibit at the right time. Thus, we can consider that the current international financial system is based on correct and solid principles, which make unnecessary its entire redesigning and rather requires a readjustment of the supervision and regulatory framework in order for it to be able to cover the issues highlighted by the financial crisis, thereby increasing the stability of the entire international financial system.

Conclusions

The process of financial innovation is influencing directly two key components of the financial sector, namely: its stability and efficiency. If regarding the positive impact that the financial innovation has on the financial system efficiency there is a general consensus, regarding the financial innovation implications on the stability of the financial system, two visions have been crystallized. One of them argues that because the financial innovation enables risks to be dispersed optimally throughout the financial system, it increases the financial system stability. In contrast with this vision, the other view highlights that, because, in certain conditions, it also allows the accumulation and proliferation of risks, the financial innovation can have a deleterious impact on the financial system stability. A possible theory concerning the dual effect of financial innovation takes into account the nature of shocks, starting from the idea that on the one hand, in the case when minor shocks are manifesting, that are less correlated, the use of for example derivative instruments (with particular reference to those who spread risk) may increase the stability of the financial system and on the other hand, in the case when large systemic shocks are manifesting, accompanied by a reduction of the liquidity at the international level (as was the case in the summer of 2007), their use may increase the vulnerability of the financial system.

Under these conditions, *there is a need for caution, because the use of some new financial instruments on a larger scale or on a different background compared with the original one, without proper regulation and supervision, could generate instability.* Thus, the ideal policy approach is in our opinion to find an appropriate balance between preserving safety and soundness of the system and allowing financial authorities and markets to perform their intended functions, by ensuring, firstly, that the necessary market-framing is in place and, secondly, by establishing a proper method for reviewing financial innovations.

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LIQUIDITY MANAGEMENT AND CORPORATE RISK

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The consequence of the economic crisis, the access of the external financing resources was narrowed significantly and lenders had become more cautious. This meant that the external source providers analyze more thoroughly the source claimants, and they also need to be more aware of their situation, to submit well founded loan applications to financial institutions. However, analysts should be aware of which are the ratios which should be paid a special attention and which ones are essential to assess a given situation, knowing them they can properly inform the leaders as well as to give an appropriate help to the decision makers. Liquidity measures are designed to provide information about the solvency and financial flexibility of the business enterprise. The traditional liquidity measures has been criticized because it mixes assets and liabilities that are quite different in terms of their maturity time. The problem with the traditional current ratio is that it treats all assets and liabilities as being of equal degree of liquidity. Similar problems were experienced in relation to the cash conversion cycle, which is also an important measure of the company's payment capability. This paper describes how should be modified these indicators in order to the decision makers able to draw correct conclusions.

Keywords liquidity management, liquidity ratios, modified liquidity ratio, modified cash conversion cycle

JEL code: G30, G32

1. Corporate liquidity risk

Volatile global markets, changing regulatory environments, and the improvement of new financial products have made the management of liabilities and of assets in the balance sheet a critical task. Today tools such as simulation, experimentation, and real-time financial reporting help in fulfilling this responsibility, but the whole assets and liabilities management strategy is changing under the weight of a fast-growing amount of debt. (*Charafas, 2002*)

The problems of last period caused in global finance markets have yielded new evidence for the importance of liquidity risk management as a sound business practice. A phenomenon that started as a narrow-minded financial market innovation regarding to increased riskiness in the subprime segment of real estate mortgage lending has since widened its effects to result in a worldwide liquidity crisis. As the Financial Stability Forum puts it, "The turmoil has brought to light interactions between credit, market liquidity, and funding liquidity risks that many regulated financial institutions did not anticipate." (*Preliminary Report to the G7 Finance Ministers and Central Bank Governors, 15 October 2007*)

The consequence of the economic crisis, the access of the external financing resources was narrowed significantly and lenders had become more cautious. The aspect is why the ratios presented in the study, the firms should be addressed much more thoroughly than ever before to have a much better understanding their situation, to recognize the sources of internal funding opportunities, and to use more efficiently the available internal resources. However, analysts should be aware of which are the ratios which should be paid a special attention and which ones

are essential to assess a given situation, knowing them they can properly inform the leaders as well as to give an appropriate help to the decision makers.

Liquidity is a complex concept defined by multiple factors, which are used by different ways. *Andrew Crockett (2009)* wrote in his study: „Liquidity is easier to recognize than to define.” Basically, the terms of liquidity means how easy we can generate cash from assets. Cash may be generated either by using creditworthiness to obtain external funds, or by the sale of owned assets in the market. Liquidity is not depending on simply on objective, exogenous factors, but it is crucially influenced by endogenous ones, especially the reactions in contrast to uncertainty and asset value changes.

However, analysts need to know the relationships which are among the ratios to provide accurate information for the leaders of the firm. In each case the information communication must be such as to enhance the company's knowledge of firms' leaders and to contribute to the increasing of organizational knowledge. (*Palepu et al., 2004*)

Liquidity risk management is addressed through strategic and operational considerations. The strategic framework must create the corporate target for liquidity risk. This includes the extent how the corporation wishes to protect from a liquidity crisis. The operational consideration means that certain constraints could be imposed on short-term borrowings or asset mix to ensure the company is adequately protected. The asset/liability management must work closely with the cash management to define the short- and medium-term cash needs, the possible impacts of various liquidity scenarios, and determine actions required to address these issues.

The liquidity ratios, net working capital, cash flow analysis and the cash conversion cycle are the basis for liquidity risk measurement.

2. Working capital management

Many companies still underestimate the importance of working capital management. To ensure the appropriate level of internal resources the company's activity is continuous financing closely related to the working capital management. The other reason is why the working capital management coming into view - which is linked to the previous one - that longer and longer payment periods have emerged in the corporate sales, in point of fact there is a significant increase in commercial lending period, the companies must be able to finance this period. The working capital is essential for companies to determine their short-term financial positions. (*Preve-Sarria-Allende, 2010*). A significant change in working capital provides important information to the company's various stakeholders, and this is especially true for the net working capital. The working capital analysis is one way the company's creditability evaluation, and helps also to better understand the company's normal business cycle.

The term **working capital** (gross working capital) refers to a firm's short-term assets, ie current assets. Managing the firm's working capital is a day-to-day activity that ensures that the firm has sufficient resources to continue its operations. This involves a number of activities related to the firm's receipt and disbursement of cash. (*Ross et al., 2007*)

Net working capital is equal current assets less current liabilities. Thus, net working capital compares the amount of current assets (assets that should convert into cash within the next 12 months) to the current liabilities (debt that will be due within 12 months). (*Keown et al., 2005*)

Working capital management involves the relationship between a firm's short-term assets and its short-term liabilities. The goal of working capital management is to ensure that a firm is able to continue its operations and that it has sufficient ability to satisfy both maturing short-term debt and upcoming operational expenses.

Implementing an effective working capital management system is an excellent way for many companies to improve their earnings. The two main aspects of working capital management are ratio analysis and management of individual components of working capital.

3. Modified liquidity ratios (comprehensive liquidity index)

In finance, this term is used in respect to several assets that can be converted into cash at fair market price without loss. A good liquidity depends on the ability to instantly and easily trade assets. (Chofaras, 2002)

Liquidity analysis is the process of measuring a company's ability to meet its maturing obligations. Sometimes, a firm having difficulty paying off its current obligations is unlikely to be able to convert its accounts receivable or inventory quickly into cash without loss of value. Liquidity measurements are designed to provide information about the paying ability and financial flexibility of the firms. In particular, the firm's creditors are interested in the ability of the company to pay off its short-term obligations until their maturity. Also, these traditional measures fail to consider the cash flow generating ability of the firm's operations.

The traditional liquidity ratios do not sufficiently take into account that how long the assets or liabilities are hold in firm's operations. However, the length of holding or turnover period has a significant impact on how quickly the company can meet the payment obligations, or changes the value of liquidity ratios. To solve this problem will be adjusted certain components of the current assets and current liabilities, and we determine the liquidity ratios using these adjusted values. The balance sheet items used to the liquidity calculation are adjusted to take account, in the case of current assets and current liabilities how much time spend the given assets in the company's operating cycle, what is ignored by traditional liquidity ratios. (Gangadhar, 2003) In case of each adjusted assets and liabilities we have to calculate the correction factors:

$$\text{correction factor} = 1 - \frac{1}{\text{turnover ratio of assets or liabilities}} \quad (1)$$

The appropriate balance sheet item must be multiplied by the calculated factors, and so we get the adjusted liquidity values. The inventories and receivables will be only adjusted amongst the current assets. The bill (trade acceptance) obligations and the long-term debt part reclassified for the current year should not be adjusted amongst the short-term liabilities. After completing the corrections, the adjusted liquidity ratios are calculated using the adjusted values of current assets and current liabilities:

$$\text{adjusted current ratio} = \frac{\text{adjusted current assets}}{\text{adjusted current liabilities}} \quad (2)$$

The company can increase the value of its liquidity ratio to achieve a growth in receivables and inventories, and to reduce the turnover ratio of its current liabilities, ie to improve an efficiency of its asset and resource management. The value of adjusted current ratio can be higher or lower than the traditional current ratio. However, if the company effectively manages its current assets and current liabilities, then the adjusted current ratio value will be higher than the traditional current ratio. (Gangadhar, 2003)

Using the adjusted current assets and current liabilities we can calculate the other liquidity ratios such as quick ratio and cash ratio. However, it should also be noted that these ratios are statics and they do not measure the company's cash flow generating capability.

The calculations were performed for a number of companies, but we present only two extreme examples in details. The most of the cases examined the direction of changes is very different, there are years with an increasing values and there are years with decreasing ones.

We present the changes of an agricultural enterprise's liquidity ratios in Table 1. The Table 1 shows that the values of liquidity ratios have improved in case of this agricultural company every year. There is a significant improvement in the level of cash ratio which is similar for all

companies with relatively high levels of cash and/or short-term securities, because they are not adjusted.

In Table 2 the liquidity ratios were calculated using data of an industrial manufacturing company. In this case, the values of liquidity ratios were decreased in all cases except the value of cash ratio. The value of cash ratios was improved by non-adjusted cash and near-cash assets in this case, but it was to a lesser extent due their lower rate.

3. Modified cash conversion cycle

The liquidity ratios are very closely related to the cash conversion cycle, since its main components are the inventory turnover period (inventory days), the receivable turnover period (receivable days) and the payable turnover period (payable days):

Title	2007	2008	2009
Inventory turnover ratio	2,34	2,36	2,91
Adjusting factor	0,5732	0,5763	0,6564
Receivables turnover ratio	6,95	8,39	3,97
Adjusting factor	0,8561	0,8809	0,7479
Turnover ratio of current liabilities	2,93	1,87	2,17
Adjusting factor	0,6584	0,4665	0,5393
Current assets	1 101 777	1 328 662	1 150 028
<i>Adjusted current assets</i>	<i>749 084</i>	<i>963 321</i>	<i>843 551</i>
Current liabilities	593 861	1 005 973	777 497
<i>Adjusted current liabilities</i>	<i>391 020</i>	<i>469 308</i>	<i>419 267</i>
Current ratio	1,8553	1,3208	1,4791
Adjusted current ratio	1,9157	2,0526	2,0120
Quick ratio	0,6058	0,5265	0,7333
Adjusted quick ratio	0,8279	1,0715	1,1042
Cash ratio	0,1844	0,3032	0,1863
Adjusted cash ratio	1,1821	1,4283	1,0764

Table 1.: Changing of liquidity ratios due the adjusting in case of an agricultural enterprise

Title	2005	2006	2007	2008	2009
Inventory turnover ratio	131,78	69,72	70,65	32,52	9,03
Adjusting factor	0,9924	0,9857	0,9858	0,9692	0,8892
Receivables turnover ratio	3,57	5,09	4,61	5,83	2,99
Adjusting factor	0,7197	0,8037	0,7832	0,8285	0,6660
Turnover ratio of current liabilities	3,64	7,09	4,04	4,43	1,48
Adjusting factor	0,7255	0,8590	0,7522	0,7745	0,3244
Current assets	1 438 871	1 130 508	1 295 583	1 313 677	979 278
<i>Adjusted current assets</i>	<i>1 046 781</i>	<i>923 978</i>	<i>1 038 178</i>	<i>1 125 999</i>	<i>732 959</i>
Current liabilities	1 368 439	751 736	1 350 702	1 394 371	1 343 994
<i>Adjusted current liabilities</i>	<i>998 115</i>	<i>653 932</i>	<i>1 026 578</i>	<i>1 089 531</i>	<i>466 294</i>
Current ratio	1,0515	1,5039	0,9592	0,9421	0,7286
Adjusted current ratio	0,7649	1,2291	0,7686	0,8075	0,5454
Quick ratio	1,0238	1,4021	0,9021	0,8058	0,5646
Adjusted quick ratio	0,7375	1,1288	0,7123	0,6754	0,3995
Cash ratio	0,0025	0,0098	0,0269	0,0454	0,0703
Adjusted cash ratio	0,2890	0,2845	0,2175	0,1800	0,2536

Table 2.: Changing of liquidity ratios due the adjusting in case of an industrial manufacturing company

$$\text{cash cycle} = \text{operating cycle} - \text{payable turnover period} \quad (3)$$

$$\text{operating cycle} = \text{inventory turnover period} + \text{receivable turnover period} \quad (4)$$

Based on the above relationships [(3)-(4)] it is also determinable that an increase in adjusted current ratio will reduce the cash conversion cycle to lead to more efficient cash management.

The cash conversion cycle is the number of days negotiated financing is needed to support the operating cycle of a business. The cash conversion cycle then is a measure of how efficiently a company operates. But more importantly, it's a measure of cash creation efficiency in the business. Calculating the cash conversion cycle, sometimes called the asset conversion cycle, tells you a lot more about ability to pay than the current or quick ratio. The cash conversion cycle, while a relatively new metric, is widely used in corporate finance.

It is the weakness of the traditional cash conversion cycle not to be adequately express the conversion period days in the net working capital requirement given in cash. In addition, it does not adequately distinguish between cash and credit sales, which can cause problems, ie. if two companies have the same receivable period, but they have different proportions of credit sales. In the traditional model, both companies will have the same cash conversion cycle, while the company with higher cash sales will be a better placed to fulfill its obligations on time. This is so, because it will have able quickly and safely to collect a greater portion of sales. The traditional cash conversion cycle model does not deal the profitability impact on the liquidity. Because the profit is a surplus resource what covers the liabilities therefore the profitability takes actually as a support factor of corporate liquidity. To determine the net working capital given in cash to be build in the „gross return on sales” and the "credit sales/total sales" ratios in the cash conversion cycle model. The net working capital what was determined in this way is necessary to the firm's operation.

The determination of the modified ratios

$$\text{modified inventory turnover period} = \text{inventory turnover period} * (1 - \text{gross return on sales}) \quad (5)$$

$$\text{modified receivable turnover period} = \text{receivable turnover period} * \text{proportion of credit sales} \quad (6)$$

As the gross return on sales is increasing, so is decreasing the operating working capital requirement. The cash flow difference between the beginning and end of the cash conversion cycle is the direct link to the profitability. This means that the more profitable business creates more cash flow from its operations.

We can see in Table 3 that both operating and cash cycle are decreased, for example there was a more than 20% decreasing in 2008. A high scale of change has already altered the position of the company's judgement. The cash conversion cycle was negative in 2008, which means that the firm's payable turnover period is greater than its operating cycle, ie the firm has its suppliers and creditors to finance himself. Whereas the company's short-term loans make up 40 % of current liabilities, therefore the firm was financed by its suppliers.

Title	2007	2008	2009
Inventory turnover period	156	155	125
Receivable turnover period	53	43	92
Operating cycle	209	198	217
Payable turnover period	125	195	168
Cash cycle	84	3	49
Gross return on sales	2,63%	8,63%	2,53%
Modified inventory turnover period	152	141	122
Credit sales ratio	85%	78%	83%
Modified receivable turnover period	45	34	76
Modified operating cycle	196	175	199
Modified cash cycle	71	-20	31

Table 3.: Modified cash conversion cycle of an agricultural company

We can see in Table 4 that the changes are to a lesser extents, however, the table also shows that the cash conversion cycle contains a fairly high negative values in 2009. The negative value of 2009 year can not be sure to derive from the fact that the firm is well able to enforce its interests, but rather it is an indicator of firm's payment problems. In this case the high negative value of the cash conversion cycle shows an increase in debt financing. The credit ratio inside the current liabilities is around 40% in the first year what started to increase in the next years and it was exceed more than 90% in 2009.

Title	2005	2006	2007	2008	2009
Inventory turnover period	2,8	5,2	5,2	11,2	40,4
Receivable turnover period	102,3	71,6	79,1	62,6	121,9
Operating cycle	105,1	76,9	84,3	73,8	162,3
Payable turnover period	100,2	51,5	90,4	82,3	246,6
Cash cycle	4,9	25,4	-6,1	-8,5	-84,2
Gross return on sales	6,10%	5,14%	4,40%	8,94%	-0,88%
Modified inventory turnover period	2,6	5,0	4,9	10,2	40,8
Credit sales ratio	100%	99%	100%	100%	100%
Modified receivable turnover period	102,3	70,9	79,1	62,6	121,9
Modified operating cycle	104,9	75,9	84,1	72,8	162,7
Modified cash cycle	4,7	24,4	-6,4	-9,5	-83,9

Table 4.: Modified cash conversion cycle of an industrial manufacturing company

4. Conclusions

Working capital management almost always determines the ability of a firm to earn profit. Efficiency with which a firm handles working capital ensures prosperity while neglect would spell danger for the survival of the firm. The managerial decision-making is needed to accurate ratios what describe the current situation of the firm, and they are also suitable for forecasting.

The traditional liquidity ratios, if we do not take into account the turnover periods, under- or overestimate the actual payment capability of the company. Incorrect liquidity values may lead to inappropriate management decisions. A similar situation exists in relation to the cash conversion cycle as well. The cash conversion cycle is the net time interval between the expenditure of cash in paying the liabilities and the receipt of cash from collection of receivables. It is often a more accurate measure of overall liquidity than current ratio. The modified cash conversion cycle also shows that more resources will be used for enterprises non-operational purposes as if we make the calculation with the traditional cash conversion cycle. It is also shown that the increase in "credit sales proportion ratio" results an additional increase in net working capital demand, which is clearly follows from the fact that the ratio represents an increasing debt and sales levels. With the application of the presented ratios we get more opportunity to explore and analyze the financial situation.

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ASSETS' STRUCTURE AT CREDIT UNIONS

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Balance is a static tool for assessing the entity's position, profit and loss on one hand and cash flow statement on the other hand. These are dynamic situations on one hand showing the effectiveness or ineffectiveness of the total consumption of resources (profit and loss) and on the other hand entity's business viability (by cash flows).

As reflection of financial position, the balance, established at the end of the reporting period (called a financial year), describes separately items of assets, liabilities and equity of the company.

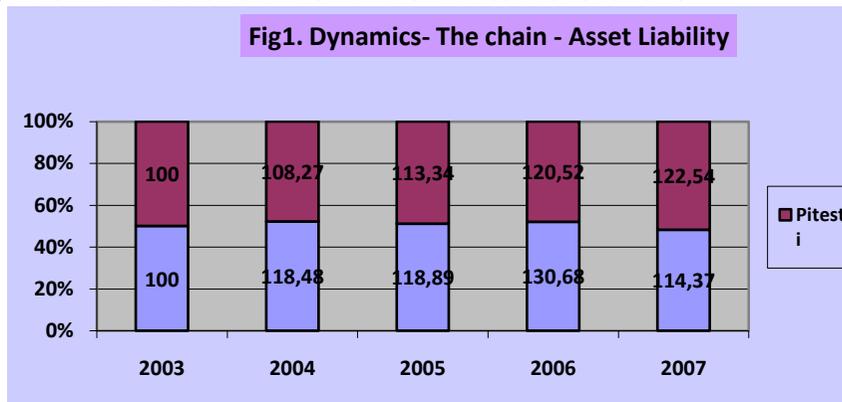
Assets are resources controlled by the enterprise as a result of past events and from which is expected to generate future economic benefits for the enterprise. The economic benefits correspond to a production potential, a possibility for conversion into cash or a reduction in output capacity of funds (cost reduction) that an asset contributes, directly or indirectly to a company-specific cash flow.

Keywords: assets, credit unions, balance sheet, bank, customers

JEL classification: G2

1. Analysis of credit unions assets

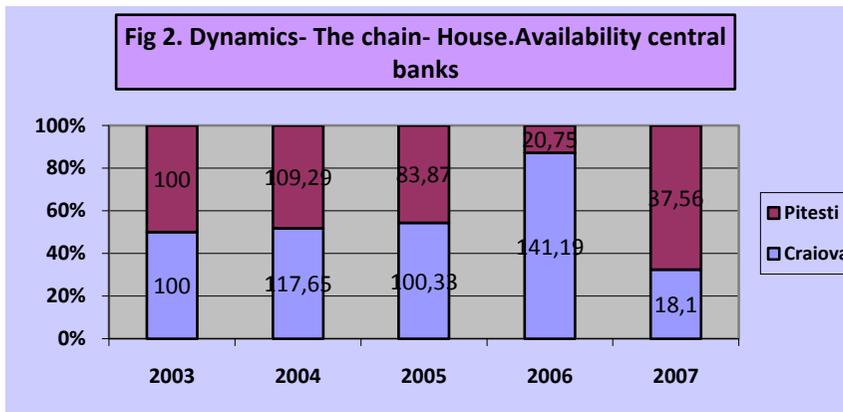
Graphically, the same evolution of the balance sheet asset is as follows:



Source: Own calculations based on the aggregated financial statements

The above graphic shows that the current credit unions in Craiova and Pitesti have had an upward trend (annual growth stood at a level above 10%) during 2003 and 2007, except during 2006-2007 when the Credit Union from Craiova has a slowdown in the growth rate from 30.68% in 2006 to 14.37% in 2007.

⁶³ This paper is part of the doctoral research project "Contributions to improve analysis and management of assets and liabilities in units of Credit Unions in Romania" under the guidance of Ph.D. Professor Ioan Batrancea, Babes Bolyai University of Cluj Napoca, Faculty of Economic Sciences and Business Administration, the 2007-2011

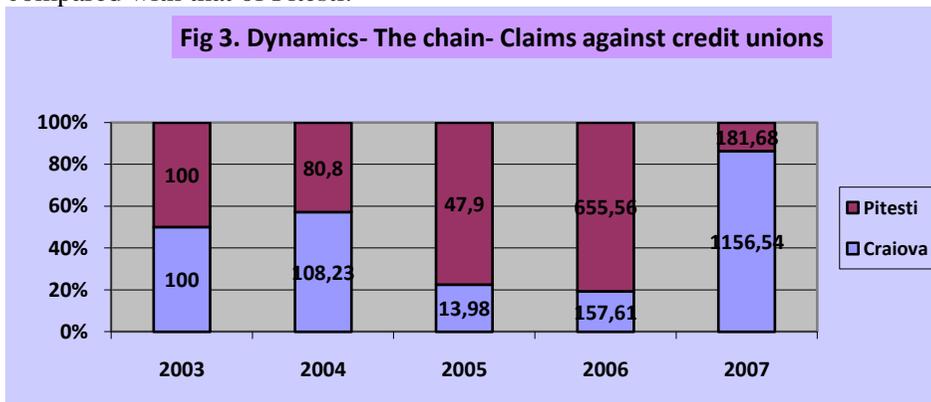


Source: Own calculations based on the aggregated financial statements

The data presented in Figure 2 produces two liquidity developments of the two credit unions, as follows: - at Credit Union in Craiova, annual trend shows a favorable liquidity during 2003 - 2006, when they recorded annual average growth rates, as follows: 17.65% in 2004, 0.33% in year 2005, 41.19% in 2006. The year 2007 saw a drastic reduction in credit union's liquidity to a level of 18.10% from that recorded in 2007;

- at Muntenia Credit Union from Pitesti, liquidity was following developments: 109.29% in 2004, 83.87% in 2005, 20.75% in 2006 and 37.56% in 2007;

- from these two developments, results a better state in terms of liquidity in the credit union from Craiova, compared with that of Pitesti.



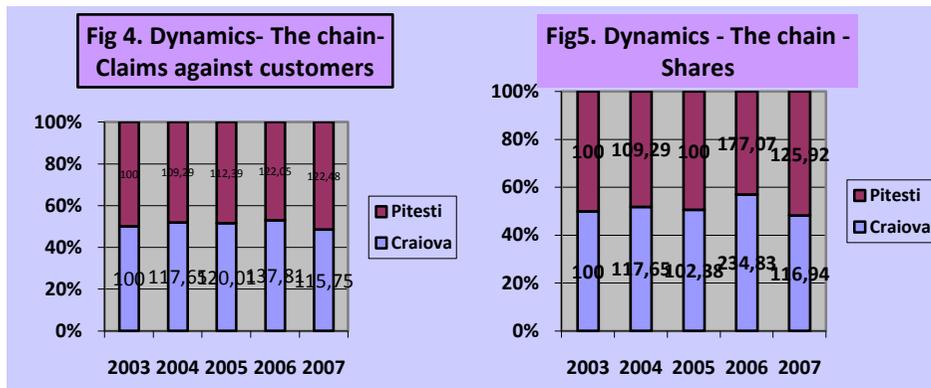
Source: Own calculations based on the aggregated financial statements

Another important element that can be identified in the evolution of balance sheet assets refers to "Claims on credit institutions." The chart above show the following aspects:

- to Credit Union in Craiova, on the interval time between 2003 and 2005, the indicator showed an upward trend from 108.23% in 2004, followed by a downward trend from 13.98% in 2005, and again an upward trend during 2006 to 157.61% 1156.54% in 2006 and in 2007;

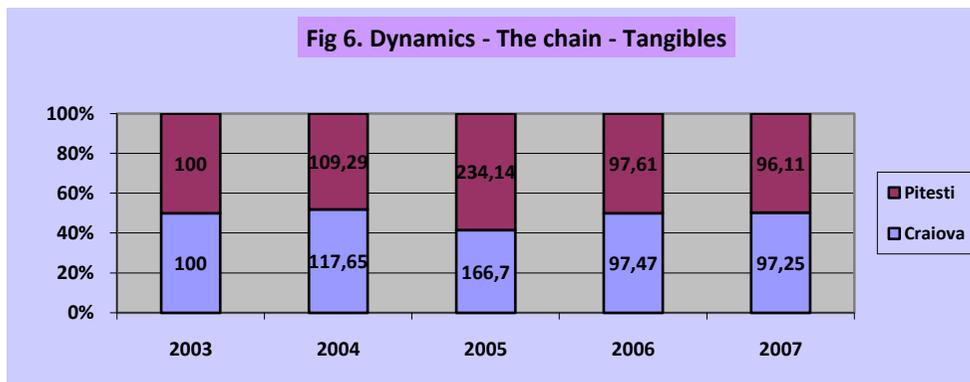
- to Credit Union Muntenia in Pitesti, there is a reduction in the level indicator for the period 2003 - 2005, followed by an increase in the indicator up to 655.56% in 2006, after which the indicator is reduced to 181.68% compared with past performance.

Following the evolution of claims against customers, we observe that in both cases are recorded annual growth rates throughout the period analyzed. In Credit Union of Craiova's case, the indicator is reduced by 12% compared with the rate recorded in the previous year.



Source: Own calculations based on the aggregated financial statements
 The annual rate of shares of the two credit unions was considered an upward for the duration, but different time intervals, as follows:

- at Credit Union in Craiova, the indicator has evolved to the level of 117.65% since 2004 to a level of 234.83% in 2006 and 116.94% in 2007;
- the evolution to CreditUnion from Pitesti is similar: 109.29% in 2004, 177.07% and 125.92% in 2006 to 2007;
- in 2005, the indicator was identical to that recorded in 2004, for both credit unions.



Finally the last important item in the balance sheet asset of the two unions is the tangible. The data presented in the above chart results in a symmetrical evolution of the level of this indicator, the entire period analyzed. Thus, the indicator in Craiova Credit Unions' case has evolved from 117.65% in 2004 to 166.70% in 2005 to 97.47% in 2006 and 97.25% in 2007. To Credit Union from Pitesti, indicator;s progress was: 109.29% in 2004, 234.14% in 2005, 97.61% in 2006 and 96.11% in 2007.

2. Analysis of balance sheet asset structure of credit unions

This analysis is required in diagnosis of the condition of performance, because it reveals the extent to which credit cooperative's assets participate at the institution's financial cycle.

Rate structure of assets are grouped into:

- The rate of cash - reveals their share in the total banking transactions reflected in the balance)
- The rate of claims on bank customers - reveals the share of claims against banking customers in total assets

- c) The rate of claims against customers - highlights the non-banking credits to customers's share in total banking assets
- d) The rate of investment in securities and financial assets - reveals that the share of external economic and financial relations hold in total bank assets.
- e) Equity ratio - is determined as a percentage ratio between bank holdings of capital of other companies and total bank assets
- f) Rates of intangible assets - which expresses the share of this category of assets held in total assets
- g) Ratio of tangible assets - shows the share of net book value of this category held in total assets
- h) Other assets ratio - is calculated as a percentage between other assets and the bank's assets from the end of the period under review.
- i) The rate of expenditure in advance - is determined as a percentage ratio between the balance of costs in advance and the bank's assets from the end of the period under review.

Table 1. Active structure diagram

	Craiova 2003	Pitesti 2003	Craiova 2004	Pitesti 2004	Craiova 2005	Pitesti 2005	Craiova 2006	Pitesti 2006	Craiova 2007	Pitesti 2007
Expenditure in advance	0.01	1.32	1.21	1.34	0.78	1.05	0.68	0.71	0.58	0.63
Other assets	0.24	0.36	0.24	0.36	0.22	0.55	0.14	0.36	0.08	0.12
Tangible assets	15.80	5.61	15.69	5.67	22.00	11.94	16.41	9.67	13.96	7.59
Intangible assets	0	0	0	0.03	0.05	0.02	0.03	0.01	0.02	0
Shares	2.09	3.28	2.07	3.31	1.78	2.87	3.21	4.22	3.28	4.34
Claims against customers	67.96	78.16	67.49	78.89	68.13	76.87	71.84	77.85	72.71	77.81
Claims against credit unions	6.32	3.69	5.77	2.75	0.68	1.14	0.82	6.22	8.28	9.22
House, availability to central banks	7.58	7.58	7.53	7.65	6.36	5.56	6.87	0.96	1.09	0.29

Source: Own calculations based on the aggregated financial statements

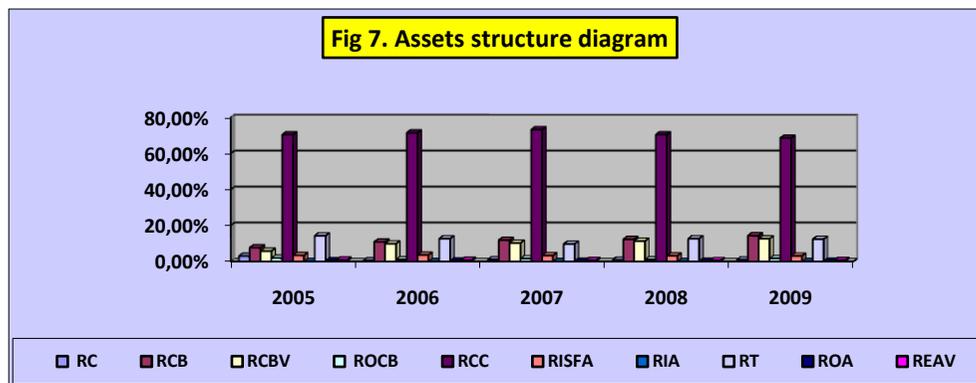
The data presented above shows that throughout the period under review, both the credit union in Craiova and Pitesti have the share in total assets (65%) owned by claims on non-bank customers, due to the subject business credit institution.

Tangible assets have a 9% share over the entire period analyzed, and claims on bank customers have weights ranging between 0.68% and 9.22%.

Finally, the funds of the two credit unions are evolving at a level between 0.29% and 7.65%.

This analysis is required because diagnosis of the condition of performance reveals the extent to which current credit cooperative financial institution participate in the credit cycle. The research I have undertaken has been based on data from a group of banks within Creditcoop. Further research results will be displayed based on data taken from published financial statements.

Evolution rates credit unions' assets considered are shown below.



Source: own illustration based on the aggregated financial statements

The data presented above show that throughout the period under review, the share of total assets (over 68%) is owned by claims on non-bank customers, due to the subject business credit institution.

Tangible assets are weighted more than 9% throughout the period under review, and claims on bank customers have weights ranging from 7.64% and 14.32%.

The funds of the two credit unions are evolving at a level between 0.92% and 2.96%.

Conclusions and suggestions

Property assets are represented in the current accounting rules as economic resources resulting from the investment of financial resources obtained by the entity from its owners and creditors.

If we consider a different approach, we appreciate that heritage assets include the specific property of the entity, representing the physical form of the Heritage Assets by nature is ordered in the balance sheet and liquidity, and debt and equity, by nature, and enforceability.

According to International Financial Reporting Standards asset is a resource controlled by the enterprise as a result of past events and from which is expected to generate future economic benefits.

To be classified as an element of balance sheet, asset must meet three cumulative conditions:

- asset must generate probable future economic benefits in an enterprise, which will result in net cash inflows;
- entity is able to use benefits and to restrict others entities' access to that benefit;
- event that generated the benefit must have occurred.

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THE CREDIT RISK- COMPONENT OF THE BANKING RISKS

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Abstract: The risk management means the risk identification, evaluation, quantification and the strategy to counter and to find solutions and levers which can abate or even eliminate the possibility to appear of the probable consequences if they have place. The credit generates risks. The inadequate financial state of the companies plus the economic conjuncture and the absence of the surveillance are the principal causes of the risks. From the bank perspective, the effects are materialized in total or partial losses of the borrowed capital.

As consequence, to avoid these risks or to diminish it, the banks proceed to the carefully analyze of the authorized limits to offer credits, to create immobile and mobile guaranties, the carefully surveillance of the clients activity during all the time of the credit.

JEL Classification: G32- Financing Policy; Financial Risk and Risk Management;

Key words: Credit, risk, risk management, risk assumption, financial risk, corporation risk, bad credits.

1.Introduction

The banking risks management, as a basic element of the banking management, follows to diminish as possible the negative influences of the risk elements, to minimize the loss by reducing the expenditures and to maximize the direct and transferred incomes, to modify the employers' behavior and to improve the bank image.

As a component in the banking risks, the credit risk is the risk assumed by the bank in case of failure of one of its clients. A bank which is strong employed in a company, by the participants to its capital and by the credit offered, will confront with this risk in the case of failure. The cause of the credit risk is the bad financial state of the companies and the term economical aspects.

Depending of the guaranties natures and the capitalization possibility, the risks that a bank exposes are: partial and total risks.

The protection of a bank against the risk means to create immobile and mobile guaranties, the carefully surveillance of the authorized limits in offering credits; the surveillance of the clients activity during the credits, in the situations of payment delay the bank must action to find the causes which have generated the delay, the payment possibilities and the recovery of the remaining rates.

2.The literature and the practice in the domain

The French Rauch and Gerard Nauller, in their book “Le control de gestion bancaire et financiere” define the risk as a commitment having an incertitude, having a win or prejudice probability, as abasement or loss.

The International regulations Bank of Basel presents one of the most complex classifications of the banking risks and their issues.

The practice in the domain of a bank against the risk means to create and to respect the procedures against the risks. The procedures regarding the credit risk must regard all the activities and to see the credits at the individually level and at the level of whole portfolio. These procedures must be established by the commercial banks in the function to assure the identification possibility since the analysis level of the bad credits, presenting evident signals

regarding the impossibility to repay in the future the terms establishes for the rates and the interests, the evaluation of new business opportunities, the credits according, the maintain of solid standards of credit, the monitoring and the control of the risk control, the BANKING RISK.

3.The banking risk. Concept and classification.

Etymological, the concept comes from the Latin “re-secare”, which means a fissure in a balance. In the banking activity, the risk assumption can be investigated for its probable future advantages, as for example the speculative operations on the finance market, but also of the probable loss.

In generally, the risk assumption is related to the basic function of the economy, the investment function. Because the risk is an attribute of the investments in generally, the risk assumption becomes inevitably and justifies the banks existence.

The banking risk can be considered a phenomenon which appear during the ongoing of the banking operations and creates negative effects over the activities, by damaging the business qualities, diminish the profit and even record loss, affecting the bank function. The banking risk can be created into it, by its clients, because of the extern competitive average.

To treat the complex subject of the risks in the banking activity, it is necessary first a clear and coherent definition of it.

The banking risk can be defined as:

- a complex of events with adverse consequences for the bank;
- an uncertain event possible and future which can affect the whole activity of a banking company;
- the probability to not get the profit expected or even to have a loss during a transaction.

The credit activity of the banks confronts with the following types of risks:

- 1.Finance risks
- 2.Intermediation risks
- 3.Banking risks.

1.The finance risks are assumed in the process of adjustment of the patrimonial structures according the accountant balance.

In this case we can find:

-The solvency risk comes as a consequence of the non-fulfillment of the credit contract clauses by the client. The failure of the conditions can be lead to a definitive loss of capital for the bank or, in the best case, it can be recovered partially or delayed, of a part of the credit.

“It must be also noted that an uncontrolled growth of the interest rate can bring to the multiplication of the insolvency cases of bank debtors, because the growth of their liabilities generates, usually, beneficiary liabilities of credits unpaid on time. From the banking practice, it results that the most important aspect is the accent which must be put on the risk evaluation when offering credits and on the definition of the current risk interval.” [1]

-The liquidity risk indicates the potentially incapacity of the bank to finance and to honor the own obligations on short time. “This type of credit corresponds to the treasury risk, which doesn’t always put the problem to realize the demanded liquidity, but the price which must be paid to get it. From this reason, the banks, using specifically processes, must permanently study and maintain an adequate level of liquidity” [2]

As the bad credits level increase, the bank gets a reduction of the clients capacity to sustain the due service.

The prognosis of the financial needs diminish the exposure to the bank.

The risk of the interest rate or the market risk means the probable negative effect of changing the interest rate, which actions over the cash flow, but also over the value of the actives and passives banking. It is possible to get often an emergent banking market. As a consequence of the increase rates development, the banks profits are diminished because of the high cost of the financial

resources purchasing. If the costs of the resources purchasing increase faster than the gain from clients:

-it can result the registration of negative gains, the fall of the net value and even the possibility to appear the insolvency bank danger.”

2.The intermediation risk of the banks in their quality of suppliers of banking services are:

-The efficient operating risk, which means the capacity of the bank to provide the maximum of services in a profitable manner.

-The technological risk express the possibility that certain banking companies become inefficient because of the distribution system of the banking services. The incorrect choice of the moment to put on the market a new product or the moment to introduce the new one can create significant loss and there is the risk that the moment be not the best from their point of view of the banking profit maximization.

-The risk of the new product is associated with the introduction and the diversification of the products offer at new banking services. It shows the cumulated probability to produce many adverse effects, as: the demand location under the anticipated level of the overcome of the planned level of the specific costs, the lack of professionalism of the managing team etc.

-The strategy risk represents the bank capacity to select the geographical and operating areas which will be profitable on the future for the bank. It express the probability to not choose the best strategy in the given conditions.

-The fraud risk regards the theft and the distortion of funds by the banking functionary.

-The operational risk express the possibility to make mistakes in the correct ongoing of the banking operations, material implications and implications which affect the society prestige and it's position on the market. It express the probability that the bank become unable to assure the serving of the clients in a profitable way. In this context, the important things are the services offered and also the capacity of the direction to evaluate and to control the expenditures generated by the services provide.

3.The banking risks that the bank must assume in its quality of banking enterprise, having the activity regulated by the Central Bank.

Here we have:

-The economical risk is bound of national and regional economical factors, which can significantly and negatively affect the banks activity.

-The competitiveness risk appears because the majority of the bank services and products can be offered, especially in the developed economies, by a big number and variety of banking societies.

-The regulatory risk or the legislation risk means to apply regulations that can put the bank in an advantageous position on the competitive plan and to accept the fact that the legislator can modify the regulations in a measure unfavorable to the bank.

-The system risk is the danger that a bank failure entrain a chain if similar collapse in the whole financial system.

3.The risk classification- general aspect regarding the foresights of the Basel II Agreement in the domain of the credit risk

One of the most complex classifications was elaborated by the International Bank of Regulations from Basel. Conform to this classification, the banking risks are:

A.Financial risks:

-the risk of the interest rate

-the risk on the rate of exchange

-the risk of liquidity

-the risk of the titles with variable income

B.Risk related to partners:

- the customer risk
- the risk appeared on the interchange market
- the country risk
- the credit risk
- C.The commercial risk
 - the products risk
 - the services risk
 - the market risk
 - the image risk
- D.Risk related to the workforce
- E.Operational and technical risks:
 - the operations quality
 - the level of computerization and telecommunication
- F.The risk of the internal management
 - the regulation risk
 - the ethics risk
 - the strategy risk
 - the risk of functional failure
 - the risk of human resources
 - the communication risk
 - the total financial internal control risk

The committee of banking surveillance from Basel:

-is an international organism created by the ambassadors of the banking surveillance authorities and of the central banks from the principally industrialized countries.

-acts in periodical meetings (at every 3 months) at the headquarters on the International Bank of Regulations from Basel (Switzerland): Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, Holland, Sweden, England and USA.

-the agreement from 1988 has established a minimum limit of the capital because of the credit risk- the most important risk for the banks- even if it was presupposed that the whole capital offered (minimum level 8%) covers also other types of risks, by including it in the credit risk.

-from 1996, the market risk was separate and, for its cover, it was allocated a level of the capital. The majority of the first class banks offer in present more than 20% from their capital to the operative risks.

-in 2001, the Committee of Basel has elaborated the project of a new agreement regarding the minimum capital of the banking enterprises, necessary to cover minimum 8% of the bank exposure to the principal risks- risks of credit, of market and operational risk, and it was revised after the consultation of the ambassadors of the banking sector and of the surveillance authorities from all the world, the last form being issued in April 2003.

4.THE CONCEPT OF CREDIT AND CREDIT RISK

4.1.The credit concept

According to the explanatory dictionary of Romanian language, the credit is defined as “an economical monetary relation who is created between a physical or a juridical person (creditor), which grant a loan of money or send goods and services on debt, and an another physical or juridical person (debtor), which receives the loan or buy on debt” [3]. Simple said, the credit is “a good or a service given to a person, with the obligation to return, replace or pay it after a time, usually with an addition named interest.

The credit content can be seen from more points of view. We can remember two ideas, to points of view, “the credit as a social relation and the credit as an object of a social relation”. In the first

case, it defines a change relation or a repartition relation. As a change relation, we can define the credit as “a veritable change of present goods in exchange of future goods”. Other authors define it as “an economical category which shows relations of repartition of a part from the national gross product or from the national income, by who the availabilities existing in economy are redistributed, and the control over these sides is assured, in order to satisfy some objective needs of capital and to realize some economical political objectives”.

Regarding the monetary circulation and the money in 1821, Davis Ricardo affirms that: “the assignments of loan made for the issuant bank depend of the comparison between the profit rate that can be obtained bay using the sum and the rate that the bank can offer. When the market rate of the interest is more than 5%, that the England Bank use to offer, the discount service is assaulted from the loan demands; when the market rate is even temporary less than 5%, the functionaries from this service have nothing to work”.

Regarding the public credit system, system of the state dues, which started in the Middle Ages in Geneva and in Venice, “it take over the whole Europe, during the manufacturing period. It result the idea that a nation becomes rich if he has more dues. The public credit becomes the capitalism creed.

The credit was and still is considered “the life nerve of the production”. Starting from the theory of the tree factors of J.B.Say, a Romanian economist said that “the production is created from tree producer factors: the land, the work and the credit. But the must important element is the credit, because it can buy the land and the work, and the production is only a credit problem, where the credit is organized and simple it produce the surplus and the prosperity, where it is expensive, it eats all the income, where it produces stagnation and consume from the whole, as it happened to us, there it produces equalize”.

The credit is a relation with a special character, which appears between the sender and the buyer, when they transfer money in exchange of a prices named interest. From the point of view of the theory, but also of the practice, the credit needs a double approach. In the juridical assumption, for example, the credit is considered a convention between a creditor and a debt, usually materialized in a contract, regarding the production, the delivery and the payment of the value of some utilities. In the economical theory, the credit means the relations into the economical mechanism of a country, that mobilize the resources of temporary capital available, after well defined rules, to satisfy the financing need of the entrepreneurs.

Specifically to the credit relations is that they define a value transfer repayable, for a limited time horizon and with the obligation to pay the interest, as a price of the capital borrowed.

4.2.The concept of credit risk

The credit risk is defined as the probability that the debtor or the issuer of the financial instrument can not pay the interest or to repay the capital according to the conditions from the credit contract- it is an inherent problem of the banking activity. The credit risk means that the payments can be delayed or even not made, and this will implicit cause problems on the cash-flows and will affect the liquidity of the bank. The credit risk rests the uncial principally cause of the banks failure. The reason is that more than 80% from the bank balance refers in generally to this aspect of the risk management. The principally 3 classes of credit risk are:

- the consumers risk
- the company risk
- the country risk

4.3.The management of the credit risk

The management of the credit risk principally concentrates on the credits portfolio.

The appearance of the banking risks is determined by a complex of factors, that depend of the generally evolution of the economy, changes related to the bank organization, the financial decisions, the political and economical conditions.

The economy evolution can be seen the dynamic of PIB, the inflation evolution and the monetary stability.

The banks depend of the economical state of a country at a given moment, because in upstream the decisions of monetary politic taken by the central bank are applied by the banks, and in downstream the banks get their resources and make placements from and over the non-banking average, which generates macro-economical results and, in the same time, affected by the general evolution of the economy.

The activity of surveillance of the credits offered has as end the knowledge and the action to limit/ diminish the risks that the bank supports as a consequence of the activity of credit, including the fulfillment of the contractual obligations that result from the assurance contract of the financial risk, in the case of the credits offered.

The objectives of the surveillance activity are:

- the prevention of the non-payment risk for the credits offered to physical persons by watching the delay data
- the avoidance of the residuals accidentally registered because of the absence of time, on the ignorance of the delay data or the inadmissibility of the account balance, in case of DAC (discovered account authorized);
- the identification of clients with degradation perspectives of the economical-financial state, in order to take good measures;
- the recovery of the clients residuals;
- the rehabilitation of the problematical credits.

During all the period of credit, the bank will watch in permanence the way in which the client uses the credit, if he uses for the end that he declared and if he respects all the contractually conditions.

The payments or the credits offered are made only after signing the credit contract, the drawing of all the legal documents regarding the creation of assurance guarantees accepted by the bank and the assurance polices presentation, issues from the enterprises of assurance-reassurance agreed by the bank.

The credit moderator is responsible to verify the use of the credit for the end approved and he has the obligation to approve all the payment documents presented by the client.

The payments from the credit account will be made on the measure of recessions, with the sums demanded by the clients and accepted by the credit moderator, including the commissions afferent to these payments. The payment documents rest to the bank to make the payment, they a copied and put into the file of client.

The credit moderator will watch the process of the economical agent activity, the capital movement by the bank, the way of paying on time the rates and the interests. If a discrepancy comes, he will make an analyze of the causes and he will identify with the client the solutions.

If by approving the credit it is mentioned a term of employment of the credit, but until that data the client don't use or uses only a part of the credit, the moderator has two possibilities:

- he asks to the organisms which approved the credit to carry-over the employ term, mentioned in an additional act;
- he makes an additional act to diminish the credit at the level of the credit already used, by an express acceptance from the Committee of credit and risk.

In this send situation, it is made a new amortization graphic, here every rate will be smaller that the rate from the month of that graphic.

If it is seen that the credit beneficiary used the credit for other destinations than those that they established in the credit contract, the credit moderator has the professional obligation to inform immediately the direction of the bank, who will take the following measures:

- the ceasing of the using of the accorded and unused credit and of the acceptance of other credits;
- the pass of the credit to the remaining and measures to recuperate the credit and its costs;
- the sanction against the bank employs guilty of the non-respect of the credit destination, by respecting the Working Code.

The attentive and responsible surveillance of the credits use presuppose also periodical visits of the credit moderator at the economical agent, where he will pass to the economical-finance analyze using the last balance of check, the effective control of the guaranties from the point of existence, integrity and conservation, the investigation of their causes and the consequences that the probable modifications in the activity or in the management of the enterprise can have over the relation of the client with the bank.

The surveillance of the credit has place during all the ongoing, to prevent the default.

5.The research methodology

The credit risk, as a component of the banking risk, is a problem often considered at the last time, so the theme chosen is very actual and in concordance with the most recently studies and steps made in the banking system regarding the new management demands of the risk and of approach conform to Basell 2.

We proposed to make an analyze regarding the banking performance of the credit risk management and measures regarding the diminish of the elimination of it, starting from the risk management, which means the identification, the evaluation, the quantification and the strategy to counteract, to find solutions, to find ways to simplify or to eliminate the possibility of appearance and the consequences in case of appearance.

6.Conclusions

To eliminate totally or partially the credit risks and to get the financial performance, the banks should consider the following aspects:

- an adequate banking prudence, to manage a credit portfolio of quality, with a good capacity and an assumed risk;
- the knowledge of the client, knowledge that must consider:
 - the client character
 - the client competence
 - the client capital
 - the quality of the relations with the business average
 - the quality of the credit guarantee
 - the knowledge and the better selection of the clients and their business
 - the identification and the evaluation of the payment capacity of the clients
 - the adequately guarantee and the consolidation of the credits offered
 - the reimbursement on time of the credits, the surveillance and the recuperation of the difficult debt
- periodical visits to the client
- economical-financial analyzes over the client activity
- the creation of a general reserve for credit risks and for risk provisions;
- the credits must be guaranteed in all the cases, they must strictly respect the intern norms of credit;

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MODELING ROMANIAN EXCHANGE RATE EVOLUTION WITH GARCH, TGARCH, GARCH- IN MEAN MODELS

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In this paper we analyze the return of exchange rate in order to test and analyze the best models which are capable of forecasting accurately there evolution. We apply the GARCH family models on the exchange rate return in order to obtain the best models for there volatility. Financial time series often exhibit abnormal characteristics, such as: serial correlation, non-stationarity, heteroskedasticity, asymmetric and are leptokurtic. Due to these characteristics autoregressive models such as autoregressive (AR), moving average (MA) and autoregressive integrated moving-average (ARIMA) are unable to capture the evolution of financial series, to represent the special characteristic of financial a hole new range of models where developed : generalized autoregressive conditional heteroskedasticity (GARCH), which are taking into account the heteroskedasticity of the errors term. The GARCH model allows for lags in the autoregressive term and in the variance term incorporates lags of the previous variance and also for the errors. The GARCH family has expanded in the last years in order to incorporate for asymmetry (Threshold GARCH, TGARCH) and risk (GARCH -in Mean).

We analyze the evolution of exchange rate for: Euro/RON, dollar/RON, yen/RON, British pound/RON, Swiss franc/RON for a period of five years from 2005 till 2011, we observe that in the analyzed period there are 2 sub-periods: 2005-2007 in which the RON appreciated constantly, and 2007-2011 in which the trend is depreciation for RON in respect to all the five currencies and the volatility was sensible higher than in the previous period. We obtain the returns on exchange rate by using the following transformation $r = \log(\text{curs}_t) - \log(\text{curs}_{t-1})$; the five analyzed series display an leptokurtic and asymmetric behavioral. Using the GARCH, TGARCH and GARCH-in Mean models, we explicit the evolution of volatility throw this period, choosing the best model using the following : minimizing the value of the sum of squared errors, Akaike and Bayesian Information Criterion.

Keywords: exchange rate, GARCH, TGARCH, AIC, BIC.

JEL Classification: G01, G21

1. Introduction

The evolution of Romanian exchange rate represent an important factor for a hole range of economic actors: banks, governmental agencies, companies and households, so the fluctuations of exchange rate and the ability to forecast her evolution is very important. For banks which must comply to the recommendation of the Basel Committee and which are ,usually, having open position on different currencies it is vital that they can understand and prognoses the future exchanges rates in order to minimize the risk of losses; for governmental agencies (especially the Romanian IRS) the evolution of Euro/Ron is important due to the fact that some of the taxes are expressed in Euro; exchange rate fluctuation can have a great on companies if there debts is in foreign currency or if the export/import; for households which in Romania are in debt especially in foreign currency the devaluation of Ron can lead to bankruptcy. Over 60 percent of loans are

denominated in foreign currency in Romania which makes our economy very sensitive to the fluctuations in exchange rates (especially Euro, dollar, yen, swiss franc). All of these reason makes important the study of exchange rates evolution.

The evaluation or devaluation of currency is not a bad think per se, what raises difficulties is their volatility because in general financial time series, including exchange rate, often exhibit abnormal characteristics, such as: serial correlation, non-stationarity, heteroskedasticity, asymmetric and are leptokurtic.

2. Literature review

The theory of purchasing power parity (PPP) was the first which managed to explain the fluctuations in exchange rate values in real terms , but there are limits of this theory [Guglielmo&Luis,2010] because it cannot explain the volatility, the main critics brought to this theory being given by the reduced relevance of the obtained methods and the necessity to use large amount of data series. If analyzing the exchange rate evolution from a nominal point there are problems for the researchers, for eg. the structure of the data series on the financial markets (because these are generally leptokurtic, the moment of the order 3 of the series is much bigger than in the case of normal distribution), leading to an increase of the probability of the appearance of extreme phenomena, also if the series are stationary or there is any evidence for structural breaks.

The best models used for modeling the volatility are the ARCH models [Engel, 1982] and then the GARCH generalization [Bollerslev, 1986] which lead to the appearance of some instruments advanced enough to model the financial series. The appearance of the GARCH models lead to a better understanding and a modeling of the evolution of the financial series, these models developing both in univariate and multivariate models [Bauwens, 2006]. The evolution of the Romanian exchange rate has been analyzed being used the GARCH modeling by Codirlasu [2001] on the series ROL/EURO and ROL/DOLAR for the period 2000-2001, being remarked the fact that the series follow an asymmetric ARCH process. Using series available during the period 1999-2003, Necula [2008] applies the GARCH and the Copula-GARCH modeling, concluding that the dynamic models of the type Copula-GARCH bring more information and stability concerning the obtained results.

3. Data used and methodology

The analyzed series are 5 currencies: Euro, dollar, British pound , Japanese yen and Swiss franc, the analyzed period is between January 3, 2005 and April 29, 2011, daily series; the date are obtained from Romanian National Bank official site www.bnro.ro and the econometrics software packaged used is GRETL, in order to obtain returns from the daily series we apply the following transformation:

$$r = \log(\text{curs}_t) - \log(\text{curs}_{t-1}) .$$

The ARCH models developed by Engel [1982] have the following equations:

$$y_t = B_0 + e_t \quad (1)$$

$$e_t | I_{t-1} \sim N(0, h_t) \quad (2)$$

$$h_t = \hat{\alpha}_0 + \hat{\alpha}_1 * e_{t-1}^2, \hat{\alpha}_0 > 0, \quad 0 \leq \hat{\alpha}_1 < 1 \quad (3)$$

The equation(1) expresses the series evolution, a following a normal distribution law of conditional equations (2) and (3). Equations 2 and 3 express the ARCH type models, autoregressive models with different time variance, residuals follow a normal law of 0 mean and h_t variance. The value of $\hat{\alpha}_0$ and $\hat{\alpha}_1$ must be positive, and $\hat{\alpha}_1$ has a value between [0,1] in order to avoid an explosive processes, also errors(residuals) follow a normal distribution law.

ARCH models have been developed later in the GARCH (Generalized autoregressive

conditional heteroskedasticity) by Bollerslev [1986], which bring the use of lags as an innovation in equation variance, equations in the GARCH (1,1) case are:

$$y_t = \beta_0 + e_t \quad (4)$$

$$e_t | I_{t-1} \sim N(0, h_t) \quad (5)$$

$$h_t = \alpha_0 + \alpha_1 * e_{t-1}^2 + \beta_1 * h_{t-1}, \quad \alpha_0 > 0, \quad 0 \leq \alpha_1 < 1 \quad (6)$$

It have been observed that on the financial markets the assets prices are influenced by the news (also called innovation) , so that a bad news generates more volatility than a good news. A GARCH model which treats differently the bad-good news was proposed by Zakoian [1993] – Threshold GARCH. It is an asymmetric model in which the conditional volatility is:

$$h_t = \alpha_0 + \alpha_1 e_{t-1}^2 + \gamma * d_{t-1} * e_{t-1}^2 + \beta_1 * h_{t-1} \quad (7)$$

where: $d_t = 1$ if $e_t < 0$ or $d_t = 0$ if $e_t > 0$.

Also in order to reflect the relation between risk and return another models where proposed in order to incorporate this characteristics [Engle,1987], GARCH in mean model have the following characteristic:

$$y_t = \beta_0 + e_t + \theta * h_t \quad (8)$$

$$e_t | I_{t-1} \sim N(0, h_t) \quad (9)$$

$$h_t = \alpha_0 + \alpha_1 * e_{t-1}^2 + \beta_1 * h_{t-1}, \quad \alpha_0 > 0, \quad 0 \leq \alpha_1 < 1 \quad (10)$$

In this model as the volatility rises the return are rising too, this models are useful in order to capture the risk of the assets.

4. Exchange rate models: GARCH, TGARCH and GARCH in Mean

Using the return $r = \log(\text{curs}_t) - \log(\text{curs}_{t-1})$, we obtain the following evolution of the series:

	R_DOLAR	R_EURO	R_FRANC	R_LIRA	R_YEN
Mean	-0.003560	0.002223	0.013383	-0.012068	0.010834
Median	-0.048804	-0.017661	-0.020991	-0.038889	-0.091837
Maximum	4.434815	3.385650	5.223699	4.018345	10.80639
Minimum	-4.968370	-5.106356	-5.027989	-4.838047	-7.547544
Std. Dev.	0.874067	0.487860	0.702979	0.746555	1.133958
Skewness	0.277802	0.050525	0.290114	0.072925	0.678837
Kurtosis	6.729989	16.06188	9.472018	7.815664	11.90174
Jarque-Bera	955.2118	11460.17	2836.024	1559.066	5446.158
Probability	0.000000	0.000000	0.000000	0.000000	0.000000
Sum	-5.739149	3.582965	21.57408	-19.45334	17.46505
Sum Sq. Dev.	1230.792	383.4293	796.1225	897.8817	2071.521
Observations	1612	1612	1612	1612	1612

The return of the series are different from zero for all the return, the highest return is obtain for the Swiss franc 1.33% and the lowest for the British pound – 1.20%; from the 5 currency two have negative return: the British pound -1.20% and the American dollar -0.3%. The standard deviation which measures the risk associated with these currency are the highest for Yen 1.13 and the lowest for EURO 0.48, also all the currency are asymmetric and leptokurtic. All the series where tested for stationarity using the ADF test and also for the ARCH effect: the series are stationary and the ARCH effect is present.

The evolution of the return (Fig.1) are having the characteristic of an GARCH model with periods of high volatility followed by periods of low volatility, also we can observe that the highest volatility is in 2008-2009 when the financial crisis hit the markets.

Fig.1. Evolution of return 2005 -2011

We explicit the TARCh model for dollar as being:

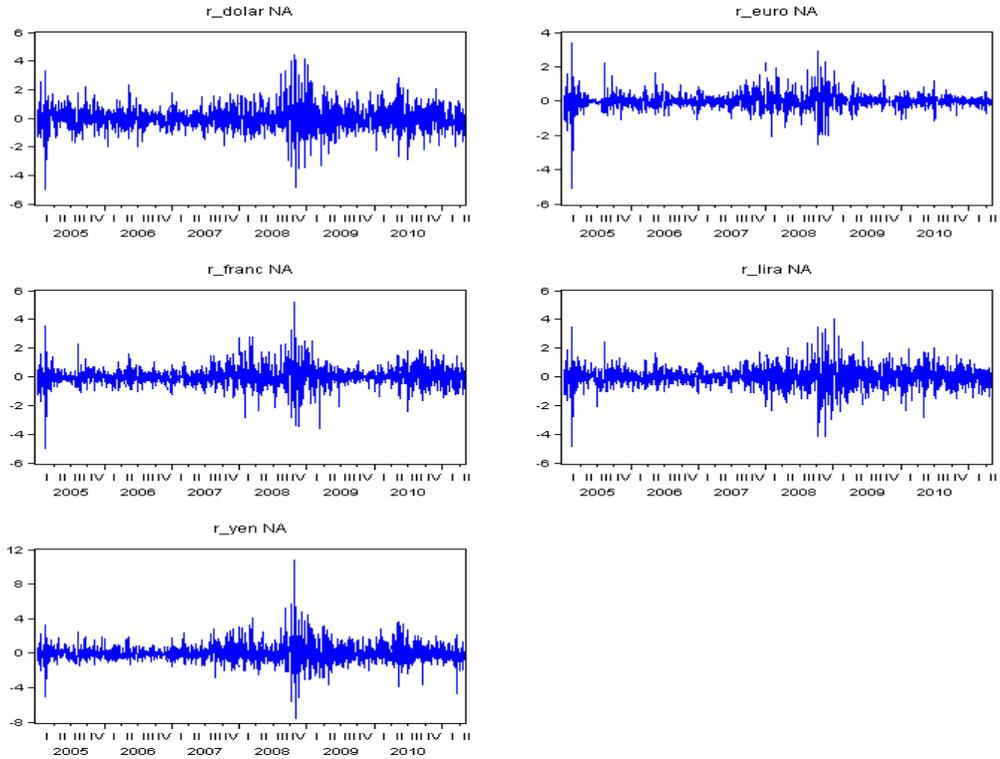


Table 1. TARCh Model dollar

Dependent Variable: R_DOLAR

Sample (adjusted): 1/07/2005 4/29/2011

Included observations: 1609 after adjustments

Variable	Coefficient	Std. Error	z-Statistic	Prob.
R_DOLAR(-1)	0.048747	0.025227	1.932310	0.0533
R_DOLAR(-2)	-0.029834	0.027110	-1.100462	0.2711
R_DOLAR(-3)	-0.046187	0.025247	-1.829397	0.0673
Variance Equation				
C	0.009057	0.002396	3.780163	0.0002
RESID(-1)^2	0.071693	0.009958	7.199375	0.0000
RESID(-1)^2*(RESID(-1)<0)	-0.026388	0.013414	-1.967209	0.0492
GARCH(-1)	0.928206	0.008137	114.0695	0.0000
R-squared	0.011721	Mean dependent var	-0.004295	
Adjusted R-squared	0.010490	S.D. dependent var	0.874680	
S.E. of regression	0.870080	Akaike info criterion	2.352069	
Sum squared resid	1215.805	Schwarz criterion	2.375490	
Log likelihood	-1885.240	Durbin-Watson stat	1.918807	

We observe that the coefficient of the equation are representative at the population level with a 95% confidence except for the second lag of the return. The normality of the estimation is analyzed throu the Durbin-Watson test which is under the critical level of 2.

Using the information criterion: Akaike, Schwarz we have selected this model for being the most performant from the TGACRH family models.

Table 2. GARCH in Mean for dollar

Dependent Variable: R_DOLAR

Date: 05/14/11 Time: 15:35

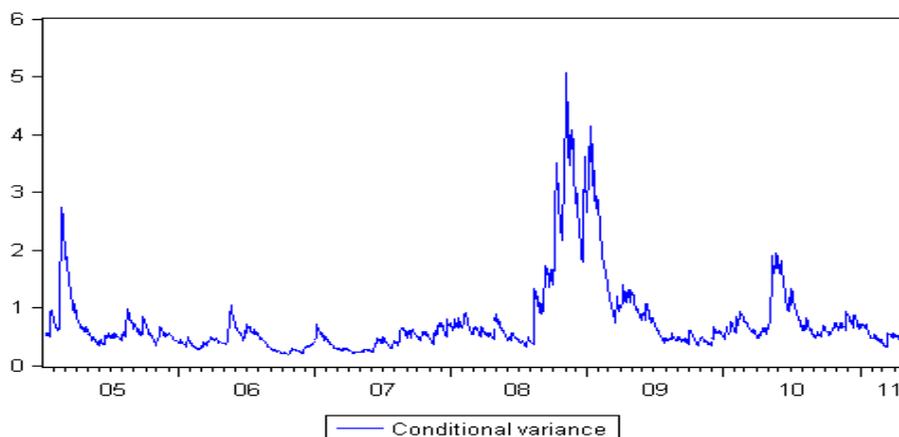
Sample (adjusted): 1/07/2005 4/29/2011

$$\text{GARCH} = C(5) + C(6)*\text{RESID}(-1)^2 + C(7)*\text{GARCH}(-1)$$

Variable	Coefficient	Std. Error	z-Statistic	Prob.
LOG(GARCH)	0.043134	0.020789	2.074855	0.0380
R_DOLAR(-1)	0.045477	0.025094	1.812215	0.0700
R_DOLAR(-2)	-0.033026	0.027023	-1.222125	0.2217
R_DOLAR(-3)	-0.053874	0.025031	-2.152348	0.0314
Variance Equation				
C	0.008319	0.002410	3.452184	0.0006
RESID(-1)^2	0.061833	0.007541	8.199630	0.0000
GARCH(-1)	0.926816	0.008588	107.9201	0.0000
R-squared	0.014756	Mean dependent var	-0.004295	
Adjusted R-squared	0.012914	S.D. dependent var	0.874680	
S.E. of regression	0.869013	Akaike info criterion	2.351012	
Sum squared resid	1212.071	Schwarz criterion	2.374433	
Log likelihood	-1884.389	Durbin-Watson stat	1.918963	

For the GARCH in Mean model we used for quantifying the risk in the mean equations after testing the model with a variance that the best way to integrate risk is using the logarithm of variance.

Fig.2 The evolution of conditional variance for dollar in a TGARC model



5. Conclusion

The purpose of using TGARCH and GARCH in Mean models is to offer a better understanding of the volatility which is found on financial markets, because financial assets have some abnormal characteristics, such as: serial correlation, non-stationarity, heteroskedasticity, asymmetric and are leptokurtic it is important to take into account them. GARCH asymmetric models, like TGARCH and GARCH in Mean, are offering the possibility for better forecasting on these assets. In these models we postulated that the error term is following a normal distribution: $\epsilon_t | I_{t-1} \sim N(0, h_t)$ but there are other possibilities: student, Generalized Error Distribution, student skewed and skewed Generalized Error Distribution. Another factor which we need to take into the consideration is the possibility of structural breaks in the series.

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THE POLITICS OF THE NATIONAL BANK OF ROMANIA TO DEAL WITH CREDITING RISK

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The market economy refers to the implicit presence of a banking system which could ensure the mobilization of all the monetary resources of the respective economy and their temporary orientation towards the development of efficient economic activities.

A significant aspect of the bank performance refers to the measurement of risks with the aim to diminish them. If the bank management is poor and the risks are not taken into consideration, it will be possible that the earning capacity to be reduced and to lead even to the bankruptcy. Due to the fact that the banks are lending, they assume risks which are determined by the doubtful debtor (it appears the insolvency), or by the general economic evolution (which involves interest and exchange rate risks), or by the financial structure of the bank (financing long-term credits from short or sight deposits).

The bank risk can be determined by external or internal factors of the bank due to the competitive environment.

In the professional literature, the methodology used for the risk management involves several steps: the risk identification and analysis; the risk elimination and control; the risk assessment and assuming; the risk financing by debiting the general or specific reserves or by transfer which means the insurance of the bank company.

For those banks operating in Romania, the risks are even more evident due to the hostile environment in which they operate, but also due to the specificity of the Romanian banking system which is still evolving and adapting to the competitive stringencies of the market economy.

This paper is trying to follow the risk involvement towards the bank activity taking into account its importance and role in order to ensure the increase of the bank earning capacity.

Keywords: crisis, credit risk, bad loans, banking supervision

JEL classification: G21

Introduction

The financial risks originate in the impossibility of foreseeing the evolution of the variation of the financial and banking risks. When employing their resources, the banks are confronted with a series of risks determined either by the quality of the organization providing the loan or by the general economic evolution or by the general structure of the bank.

The bank risk can be defined as a phenomenon which appears along with the bank activities and which determines negative effects towards the specific activity by damaging the business quality, diminishing the profit or even registering losses affecting the bank functionality.

By means of their activity of collecting financial resources and at the same time investing them in those institutions which have temporary supplementary needs, the banks fulfil an important role

acting as an intermediary. In this respect, the credit becomes an active instrument in the stimulation of economic development since it encourages the emergence of certain phenomena according to the objectives that are to be followed in perspective.

Detecting the potential banking risks presupposes familiarity with the emergence and evolution of the release factors. The quantification of their manifestation parameters and the tracking down of those indicators which can lead to their identification are very important.

Due to the authentication and prudential monitoring norms of The National Bank of Romania, the **credit risk** is defined as “the risk of recording losses or of not making the estimate profits as a consequence of the inobservance of the promissory notes.”

From an economic agent’s point of view, the *credit risk* is defined by means of the losses registered because the advance cash flow was not collected till due as a result of the degradation of the *debtor’s crediting quality*. From this perspective, the credit risk has two coordinates: rating the risk and its quality.

Rating the risk shows the kind of loss the creditor has suffered as a consequence of the debtor’s inability to refund the credit whereas *the quality of the risk* results from both the possibility that the payment may take place and from the guarantees which can cut down losses in case of non-payment. The impossibility of refunding a debt represents an insecure event. In addition, the future exposures are not known for a fact till due because crediting on the basis of refunding programs established according to solid contract clauses is to be applied only in a limited number of situations. The advance refunding of the outstanding loans displays a credit risk because in this situation the bank has to ensure a refinancing of the unattainable income and to cover the expenses generated by the credit granting.

Starting from these assumptions, the credit risk could be divided into three types of risk: *default risk, exposure risk and recovery risk*.

The Default Risk

This risk resides in the probability of non-payment of an outstanding debt. There are several possible definitions for *non-payment*: failure to keep to a payment bond, violation of a convention or economic non-payment. The default risk is proclaimed when the scheduled payment has not been carried through in a minimum period of time from the due date. *The economic non-payment* takes place when the economic value of the debtor’s assets decreases beyond the value of the outstanding liabilities, a situation which can stop the debt repayment.

The deterioration of some economic and financial indicators as compared to the assumed level at the credit contracting date could be associated with *technical non-payment*. This non-payment usually triggers negotiations even if the failure to reimburse the credits till due does not jeopardize the debtor’s creditworthiness. In certain situations, the bank can even make use its right to ask for a prompt reimbursement of all outstanding debts.

The probability of non-payment cannot be directly measured but one can use the historical statistics of internal non-payment, of the rating agencies and of the central authorities. The most representative types of ratings are: the rating of the current debts, the emitter’s rating and the industry rating. In most of the cases, the rating agencies assess the quality risk of a debt which is conditioned both by the probability of non-payment and by the possible recovery in case of non-payment.

The Exposure Risk

The exposure risk quantifies the degree of uncertainty regarding the borrowed sums. If the credit is reimbursed according to a firm contract program the exposure risk could be considered reduced or insignificant. Unfortunately, this thing does not hold valid for all crediting lines. If the crediting lines allow the debtor to access them whenever he wishes according to his needs and a maximum limit established by the bank, then the bank’s risk of exposure is considerable.

The Recovery Risk

In case of non-payment, the recovery is not predictable. It depends on the type of non-payment and other factors such as: the debtor's guarantees and the type of these guarantees which can be correlated with those of a third party. A non-payment does not mean that the debtor will never pay but draws the initiation of certain actions such as renegotiation or the incumbency to reimburse the outstanding loans. If no corrective action is to be taken into consideration then legal procedures step in: the legal instrumentation of the guarantees (which differ according to the type of guarantee accepted) and the foreclosure of the guarantees.

The experience of the banks in Romania has proven that in time, the credit risk has represented the main risk which the Romanian banking system faced against the expansion of the crediting activity since approximately half of the assets are concentrated in credits.

The global financial and economic crisis has strongly influenced the evolutions from the manufacturing and financial sectors in Romania especially during 2009 and 2010.

This interval has reconfirmed the depression tendency of the non-governmental credit starting in the first trimester of the 2008 in spite of some stimulating measures adopted by the central bank. This is an ongoing phenomenon on the credit market and represents a serious challenge for both the banks and the authorities.

A growing vulnerability of the Romanian banking system is represented by the decrease of the credit portfolio quality which has fully manifested itself in 2009 and 2010 and still persists at present against the background of the economic recession. One can add the supplementary burden which the debtors who have contracted currency credits and are not ensured against the currency risk have to support. Even if the outstanding debts are at a manageable level, their growing rate constitutes a reason of worry for the financial stability.

Non-governmental credit contraction in the period 2009-2010 occurred on reducing both the fund supply and demand for loans. In relation to the supply of credit, the determining factor has been represented by the perpetuation of the banks' aversion to risk, despite the measures adopted by the central bank in order to encourage sustainable restart of crediting (reducing the rates of minimum compulsory reserves applicable to the credit institutions' liabilities in lei and in foreign currency, reducing the monetary policy interest rate, amending some stipulations of the bank prudence rules). In the context of these measures, to which one can add the exposure of the main foreign capital Romanian banks, the market has received sufficient liquidity.

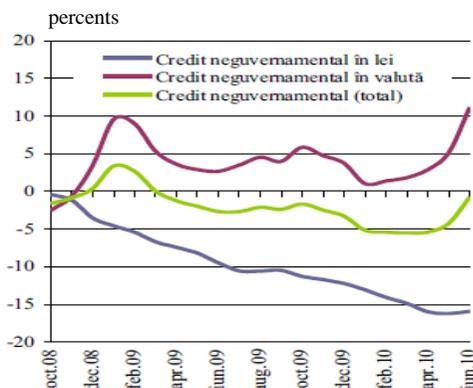
The analysis of the monthly developments of the non-governmental credit, in real terms (having as a reference point 30 September 2008 – a moment when the effects of the international economic crisis started to be felt by the banking system in Romania) reveals credit contraction starting with April 2009 (Chart no. 1).

The lending decrease for the private sector was also determined in 2010 by the cumulative action of the following factors: (i) maintaining the economic decline in 2010 and worsening the financial forecast for the population and companies; (ii) the increase of the unsatisfying credits. The credits demand has maintained the cautious character throughout the period and it has registered a relative decrease demand of new credits and an increase demand for refinancing – due to the factors related to the supply-side (interest decrease, reduce or elimination of the commissions). As regards the credit supply it was registered a slight improvement toward the year end reflected by the relative flexibility of the credit standards and terms or by the initiation of the promotion campaign of the credit cards.

The sectoral analysis demonstrates different intensity of the credit tightening during 2010. The decrease of the credit for the population was exclusively caused by the severe tightening of the consumer credit (-18,3% real annual fluctuation), its weight was diminished with approx. 10% of the total retail credit (until 62,9%). The descending trend of those credits has been emphasized in the second part of the year induced by the enhanced decrease rhythm of the population available income caused also by the 25%

decrease of the salaries in public sector beginning with July. Concerning the mortgage credit, the annual dynamic had a positive trend being maintained at 10,6% due to the flexibility of the credit standards and terms, an important contribution having the increase competition between banks.

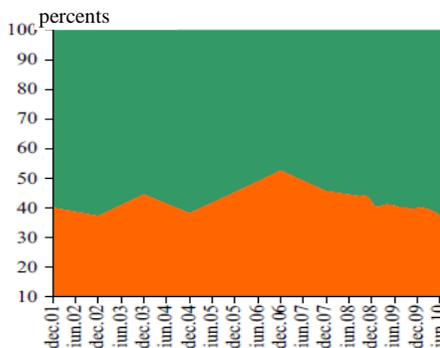
From the perspective of denomination, trends were similar, but the amplitude of movements was different. Thus, the credit in lei has witnessed a relative decrease since May 2009, the phenomenon being gradually widespread. As regards the component in currency (expressed in lei), the values have maintained positive values during 2009 (a situation mainly occurring due to differences in the exchange rate), but have followed a strong descendent trend. The first months of 2010 have marked the start of the contraction of credit granted in foreign currency, which became positive again only in May 2010.



Source: NBR
*) fixed haze 30.09.2008

Chart no. 1. The Real Growing Rythm of the Non-governmental Credit

Currency loans were about 60% of the total amount of non-governmental credit between January 2009 and March 2010, but their proportion witnessed a slight increase in the following months (Chart no. 2).



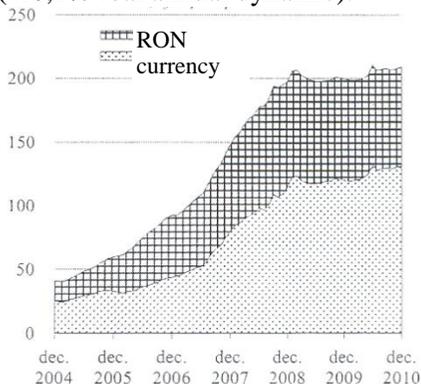
Governmental credit in foreign currency
Governmental credit in lei

Source: NBR

Chart no. 2. The Evolution of Non-governmental Credit according to the Denomination Currency

Otherwise, in 2010, the currency credit continued to strengthen its weight of the total non-governmental credit (until 63%), taking into consideration that its annual dynamic had a positive

trend all over the period (8,3% at 31st of December 2010²²) while the credit in the national currency continued to decrease (-10,1% real annual dynamic).



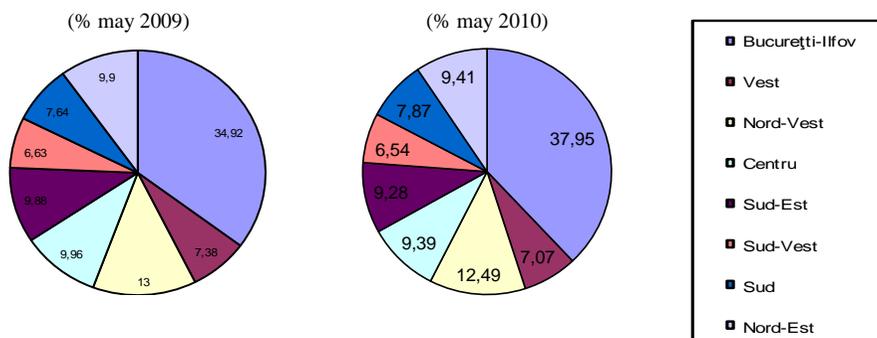
Source: NBR

Chart no. 3 Non-governmental credit - types of currency- mld. RON; end of the periode

In the context of the present economic crisis, according to the data of the National Bank of Romania the analysis of the credit sector of the counties in Romania indicates the fact that in just one year the Romanians' ability to pay their bank credits has considerably decreased. The increment of the arrears is caused by the clients' excessive crediting in relationship with the present income decrease.

Bankers have more and more problems with the non-performing loans, although they have reported reduced levels of delayed credit payment for each county between 2009 and 2010. There are multiple causes, both the surface ones such as salary decrease, job losses, interest increase and the case when clients have defrauded the banks, especially by using false papers. At the same time, if we take into consideration the fact that most of those who have arrears come from the private environment, the only sector that has known an adjustment at the beginning of the crisis, but we should not forget the state employees will have a diminished income and, thus, the non-performing loans will continue to increase.

The different rhythms of credit contraction have caused changes in the market share of the counties after the balance of granted loans. Bucharest-Ilfov preserves its leading position, with an amount of 38% of the total financing (77.54 billion) followed by the North-West region, with a financing balance at a less than third of the capital's balance (25.5 billion). The third place is occupied by two regions, Centre and North-East, which each had 9.4% of the total loans (19.2 billion). However, one can say that the North-East region has a slight advance, as the credit contraction has been lower.



Source: NBR

Chart no. 4. The Credit Intensity on Regions

According to the destination of credits (for small operators, consumer and mortgage credits) one can observe that in some counties discrepancies among these segments emphasize differences in development among the administrative territorial units of the country. Nationally, the balance of the credits for legal persons registered a total of over 100 billion at the end of May 2010, increasing by 4.4% compared with the same period of 2009.

In the total portfolio of loans the share of the outstanding and uncertain loans granted to the customers has increased from 0.32% to 1.5%, while in the total banking assets the intensity of delays in payment registered a growth from 0.29% to 1.01%. At the same time, the unadjusted exposure regarding loans and interest classified in the categories "uncertain" and "loss", including items out of the balance sheet, has increased from 5.95% to 13.52% by the end of 2010, in the context of aggravation of the financial situation of people and companies, but also in the context of increased volatility of the exchange rate of domestic currency.

The reports elaborated by the Romanian National Bank indicates that the banking system has maintained in 2010 an adequate level of capitalization, the solvency rate being of 14.4% as a result of the banks capital injections made in order to counter the effects of the credits portfolio quality deterioration. This phenomenon is reflected by the evolution of the risk credit indicators, by the risk credit rate which reached 20,8% at the end of 2010 in comparison with 15,3% in 2009.

The banks choice for the less risky investments (public securities) is reflected by the improvement of the general risk rate (until 44,6%).

As it is written in the table below, year 2010 marked the entrance in the negative field of the profit indicators for the Romanian banking system, as a result of the provisions expenses increase, of the unsatisfying assets increase and of the efficiency decrease obtained from the investments in public securities.

Table no. 1. The main indicators of banking caution

	Dec. 2009	Dec. 2010
Capital risk		
Solvability rate ($\geq 8\%$)	14,67	14,66
Leverage ¹	7,55	7,87
Credit risk		
Overdue and doubtful credits (net) / Total credits (net)	1,45	2,22
Overdue and doubtful debts (net) / Total assets (net)	1,01	1,49
Credit risk rate ²	15,29	20,81
General risk rate	47,29	44,56
Liquidity risk		
Liquidity indicator ³	1,38	1,36
Profitabilitate⁴		
ROA (Net profit/Total assets)	0,25	-0,09
ROE (Net profit/Own capitals)	2,89	-1,02
1) Own funds of 1st level/Total average assets;		
2) Unadjusted exposure for the credits and interests classified in doubtful and loss /Total credits and interests classified without the elements outside the balance-sheet;		
3) Actual liquidity/Necessary liquidity;		
4) Starting with 2008, ROA and ROE are calculated taking into account the average levels of the assets and own capital		

After the National Bank of Romania has checked the commercial banks, it has also submitted a report which stipulates a series of measures that refer to: managing risks and establishing the thresholds at which risks are considered significant; reviewing policies regarding management of liquidity risk by improving the control strategies for liquidity crisis; reviewing credit policy by setting the limits of concentration on types of credit facilities; banning the grant of unsecured consumer loans; improving the process of monitoring and implementation of safeguards reevaluation; assessing the credit risk according to alternative scenarios for conditions of crisis; complying with the maximum admissible limits for large exposure.

In conclusion, the evolution of the banking system has proven that bank monitoring remains an activity required to ensure financial stability, and the future will bring even more challenges for the competent authorities. The risks associated with the banking system are in a dynamic process, and the monitoring activity should be improved so as to counteract the functioning problems of the crediting institutions.

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A LINIAR MODEL OF ANALYZING INFLATION IN ROMANIA, BULGARIA, TURKEY AND CROATIA

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The study uses a linear model that reviews the connection between inflation rate and a few macroeconomic indicators: Harmonized Index of Consumer Prices (HICP), Gross Domestic Product (GDP) and unemployment (Unempl). The purpose of this study is to discover the influence of these macroeconomic indicators on the inflation rate, taking into consideration a period of ten years: 2000-2010. The analysis approaches this issue from the perspective of two EU member countries: Bulgaria, Romania, and another two countries - EU candidates: Turkey and Croatia.

Although the tradeoff between inflation and unemployment has been long discussed, starting with the famous idea of the Phillips curve that has evolved during time (M.Friedman, E.Phelps), economists are still studying this theme in order to find satisfactory explanation for it. In this paper we have tried to find out whether, in the analyzed countries, there is a strong tradeoff between inflation and unemployment, but we also added other variables that influence inflation: the gross domestic product and the previous values of inflation.

Our paper started with a study of the economic background of each analyzed country then, we have collected quarterly data from the period of 2000-2010, that we processed using the econometric software Gretl. After building several models for each country we concluded that inflation in Romania and Croatia are influenced by the following variables: GDP and previous HICP, while the values of inflation in the other two countries are affected by more diverse range of independent variables.

Keywords: Inflation, Harmonized Index of Consumer Prices, Gross Domestic Product, Unemployment, Monetary policy

JEL Classification: E24, E31, E52

1. Introduction

The inflation phenomenon

As a phenomenon, inflation appeared at the same time with the development of money in the market economy and has manifested during the centuries reaching historic highs in the Twentieth Century, in which national monetary systems have abandoned the gold standard due to the economic, political and social crises. Many specialists (economists and not only) have tried to define the phenomenon, to explain its causes and the impact that it has on the standard of living.

Mishkin F. (2004:10) defines inflation as a *continual increase in the price level* that affects individuals, businesses and the government. In recent years it has taken the place of one of the most important concern of the politicians and policymakers, many Central Banks have chosen the

mandate of achieving and maintaining price stability, which in turn provides an economic environment that is conducive to growth in savings and investment.

Overview of the macroeconomic background of Romania

Considering the fact that Romania has fought three digits inflation during the transition period from a centralised economy to a market one, it took almost a decade to get one digit inflation and obtain a sustainable decrease of the level of inflation rate. As stated by the Governor of Romanian National Bank, Mugur Isărescu (2008:20) between the years 2000-2007 Romania has managed to obtain an annual average 5,8 % disinflation rate in parallel with the maintaining of the financial stability through appropriate mix of economic policies.

Romania is one of the many developing countries that has adopted inflation targeting. The successful transition to the new monetary regime, made in 2005, was due to the independence of the central bank which has the sole goal of achieving and maintaining price stability.

Overview of the macroeconomic background of Turkey

Turkey is a developing country, that has joined the European Community (EC) as an associate member in 1963 on the signing of the Ankara Agreement, and in 1999 it gains the status of candidate member during the European Council of Helsinki.

Starting with December 1999 Turkey committed to program with the International Monetary Fund that sets the economic policy agenda; it consisted of two pillars that oblige the Turkish government to maintain dual targets (Telli, Voyvoda and Yeldan, 2009:203): a primary surplus target in fiscal balances and price stability via inflation targeting. This program was though for the reason of enhancing the countries credibility, eventually leading to reductions in the rate of interest that would stimulate private consumption and fixed investments. The Central Bank of Turkey was granted independence in 2001 having to follow disguised inflation targeting until conditions were ready for full targeting. Finally on January 2006 the Central Bank adopted full-fledged inflation targeting.

Overview of the macroeconomic background of Bulgaria

During 1996, Bulgaria faced with the economy collapse due to the Bulgarian Socialist Party's slow and mismanaged economic reforms and an unstable and decentralized banking system, which led to an inflation rate of 311% and the collapse of the lev. The economic situation started to change in the spring 1997, when the currency board regime was introduced. These brought growth and stability to the Bulgarian economy. The currency board contained inflationary pressures and the three-digit inflation in 1997 was cut to only 1% in 1998. Supported by a well functioning currency board and by sound income and fiscal policies, until mid 2007 the disinflation process progressed well, even in the presence of strong growth of domestic credit and of the accession related excise tax rate increases. Bulgaria's entry into the EU in January 2007 is having a significant impact on the macroeconomic situation.

Overview of the macroeconomic background of Croatia

While the political life was changing in the 90's, on the economic front, Croatia experimented macroeconomic instability, manifested through hyperinflation. At the end of 1993, Croatia introduced the Stabilization Program, based on a nominal exchange rate anchor, that has successfully achieved its main aim: in the last 13 years (from 1994 to 2006) Croatia has enjoyed a stable inflation rate (Vizek, Broz, 2007:8).

Having inflation 2% higher than majority of high income EU Countries, Croatia should be compared to newly members of EU such as Bulgaria and Romania, which both have a much higher inflation of 6%. Since the introduction of the Stabilization program in 1993, the Croatian

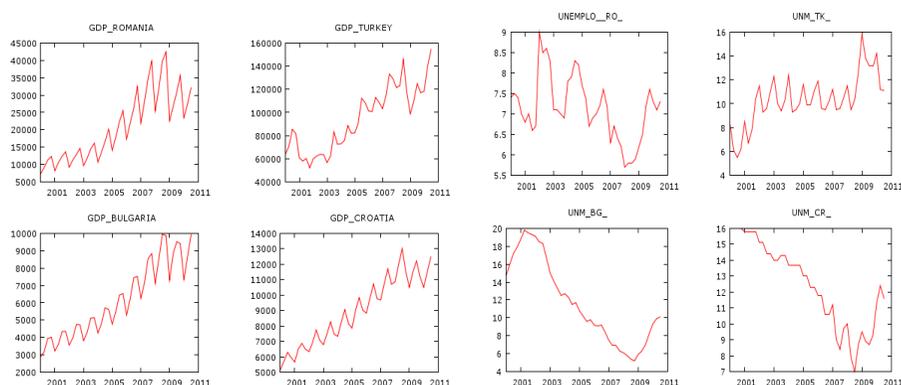
National Bank has been following the monetary strategy of exchange rate anchor. During the first several years (from 1993 to 1997) this monetary strategy achieved acceptable results, accompanied with a low inflation rate and high GDP growth rates.

2. Model

Data used and the methodology of research

Starting from the connection between the macroeconomic indicators: inflation rate, gross domestic product and unemployment rate, as shown in the economic reality, and after studying the national and international economic literature we gathered up the necessary data for a study case on Romania, Turkey, Bulgaria and Croatia in order to understand and verify the connection between the mentioned indicators.

We have collected quarterly data for the period of 2000-2010 using as sources: Eurostat (GDP and HICP, unemployment rate - Bulgaria and Romania), Turkstat (unemployment rate for Turkey) and the Institute of Economics Zagreb (unemployment rate for Croatia). In the research it has been used the open source software for econometric analysis Gretl.



Graphical analysis of time series GDP, HICP, unemployment

Figure 1: Quarterly Gross Domestic Product -millions of euro

Figure 2: Quarterly Harmonised Index of Consumer Prices –percentage

At the first view of Figure 1 it is noticeable that the basis trend line is ascending, even though during the analysed period the GDP has a fluctuating evolution, recording low values at the beginning of a year compared with the values recorded at the end of the year. Between the four analysed countries we notice that Turkey's GDP is highly over the other countries GDP's, meanwhile Bulgaria is situated at the opposite side-the lowest GDP. Until 2007 a slow growth rate of the GDP was recorded in all analysed countries, but since that point on the variation of the growth rate has substantially fluctuated. While the graphs for Romania, Bulgaria and Croatia show the seasonality of the GDP, the evolution of Turkey's GDP stands out because the seasonality is not so obvious.

The values of the Harmonised Indices of Consumer Prices between 2000 and 2010 (Figure 2) show a normal increasing evolution due to the rising prices of the goods and services in the economy, in all analysed countries. Turkey and Croatia has a smoother curve than the other two countries, indicating a continuous rise in prices without any significant decrease in prices level. On the other hand, Romania and Bulgaria experienced more sudden price change which made the curve of HICP to be more sinuous.

The country which registers the highest values of unemployment (Figure 3) rate is Bulgaria, followed by Croatia. However the unemployment rate has a sustained decrease since 2001 until 2009 in these countries. Although the other two countries Romania and Turkey registered relative

low unemployment rate, the evolution is highly fluctuating. In the case of Romania, the graphic presents dramatic changes of the unemployment rate from one year to another. Regarding Turkey, the changes are not so dramatic and seem to focus around the values of 10-12 percentages between 2002 and 2009. The effects of the economic crisis of 2008 on the labour market caused an increase of the unemployment rate from this date forward in all analysed countries.

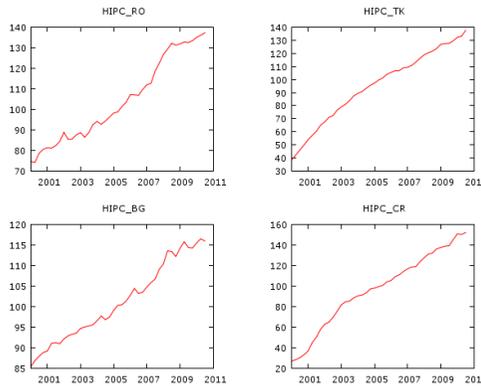


Figure 3: Quarterly unemployment rate-percentage

Adjusting the time series of GDP by removing its seasonality

Representation of data series in Fig. 1 shows that GDP has a strong seasonality, which will be removed using the X-12 ARIMA methodology⁶⁴ used by the U. S. Bureau of Statistics; in order to make them stationary they need to be differentiated.

The econometric model

Through the development of this econometric model we aim to verify the possible correlation between inflation, gross domestic product and unemployment. We have chosen the following model:

$$y_{(t)} = a \cdot y_{(t-1)} + b \cdot \frac{1}{x_{1'(t)}} + c \cdot x_{2(t)} + \varepsilon_{(t)} \quad (1)$$

where:

- $y_{(t)}$ = Current HICP (quarter t)
- $y_{(t-1)}$ = Previous HICP (quarter t-1)
- $x_{1(t)}$ = Current unemployment rate (quarter t)
- $x_{2(t)}$ = Current GDP (quarter t)
- $\varepsilon_{(t)}$ = residual variable

Being a non linear model, it is liniarised through the introduction of the variable $x_{1(t)}=1/x'_{1(t)}$, leading to the following equation:

$$y_{(t)} = a \cdot y_{(t-1)} + b \cdot x_{1(t)} + c \cdot x_{2(t)} + \varepsilon_{(t)} \quad (2)$$

After eliminating the seasonality of the GDP using the X-12 ARIMA, we have looked up for its logarithm; we have also looked up for the logarithm of the previous HICP. Using the method of Ordinary Least Squares we have obtained the two models for each country.

Romania

⁶⁴ For a broader discussion on the use of X-12 ARIMA: <http://www.census.gov/srd/www/x12a/>

In the case of Romania, current value of HICP is influenced by the values of GDP and the HICP values of the previous quarter. The constant and the unemployment rate are not representative -do not pass the student t-test, they are not relevant at the level of the population- in the first model, therefore we consider as a more relevant model, the second one.

The equations would be:

For the first model:

$$1) \text{I_HICP} = 0.08391 * \text{const} + 0.06027 * \text{I_GDP_d11} + 0.09335 * \text{inv_unempl} + 0.8535 * \text{I_HICP_1}$$

For the second model:

$$2) \text{I_HICP} = 0.06149 * \text{I_GDP_d11} + 0.8719 * \text{I_HICP_1}$$

The results of the model reveal that in the case of Romania the current HICP is directly influenced by the I_GDP and the previous I_HICP_1. The other two variables-constant and unemployment- are not representative for the evolution of current HICP.

The evolution of the current month inflation rate, shown by the HICP, is conditioned by the evolution of the HICP of the previous period (quarter) and by the evolution of the GDP.

Bulgaria

The results shown by the analysis of Bulgaria data using the model has revealed the HICP is influenced by the values of the constant, GDP and the HICP values of the previous quarter, and the values of (t-3) quarter. Due to the fact that the unemployment rate is not representative (does not pass the student t-test) in the first model we consider as a more relevant model, the second one.

The equations would be:

For the first model:

$$1) \text{I_HICP} = 0.7404 * \text{const} + 0.09624 * \text{I_GDP_d11} - 0.03088 * \text{inv_unempl} + 0.4448 * \text{I_HICP_1} + 0.2163 * \text{I_HICP_3}$$

For the second model:

$$2) \text{I_HICP} = 0.7210 * \text{const} + 0.08656 * \text{I_GDP_d11} + 0.4511 * \text{I_HICP_1} + 0.2319 * \text{I_HICP_3}$$

The results of the model reveal that in the case of Bulgaria the current HICP is directly influenced by the constant, I_GDP and the I_HICP_1 values of the previous quarter and I_HICP_3-the values of (t-3) quarter, therefore by the most diverse number of independent variables among the four analyzed countries.

Turkey

For Turkey, HICP is influenced by the values of GDP, the unemployment and the values of the previous quarter of HICP. We consider as a more relevant model the second one because the constant is not representative (does not pass the student t-test) in the first model.

The equations would be:

For the first model:

$$1) \text{I_HICP} = 0.07963 * \text{const} + 0.04119 * \text{I_GDP_d11} - 0.2778 * \text{inv_unempl} + 0.8906 * \text{I_HICP_1}$$

For the second model

$$2) \text{I_HICP} = 0.05178 * \text{I_GDP_d11} - 0.3134 * \text{inv_unp} + 0.8822 * \text{I_HICP_1}$$

From the results we can conclude that I_GDP and the I_HICP values of the previous quarter, influences directly the dependent variable: current I_HICP. The one variable that influences in an indirect way the HICP, is the unemployment rate.

Therefore after the analysis we consider that in the case of Turkey there is a significant connection between the HICP and the unemployment rate. This situation can be attributed to the fact that the unemployment rate has a highly fluctuating evolution from one year to another during the analyzed period.

Croatia

For Croatia, the first model shows that the only independent variable that is representative for the population is the previous value of HICP, therefore we generated a second model. This revealed that with the new calculated coefficients there is also a correlation between current HICP and I_GDP , besides the HICP values of previous quarter. The influence of unemployment in both models is indirect but not representative. The final model, which we consider the most relevant, because the variables are representative, shows the connection between current GDP and previous quarter HICP.

The equations are:

For the first model:

$$1) I_HICP = -0.3575 * const + 0.09323 * I_GDP_d11 - 0.4089 * inv_unempl + 0.9074 * I_HICP_1$$

For the second model:

$$2) I_HICP = 0.04429 * I_GDP_d11 - 0.1868 * inv_unp + 0.9227 * I_HICP_1$$

For the third model:

$$3) I_HICP = 0.04541 * I_GDP_d11 + 0.9168 * I_HICP_1$$

The data that we generated shows that Croatia has a similar situation to Romania's, meaning in both countries, the current value of the HICP is directly influenced by the values of the previous quarter HICP and the values of the current GDP, the other two independent variables not having a relevant influence on the dependent variable.

Conclusion

In this study we aimed to analyse the connection between inflation and some macroeconomic indicators in Romania, Bulgaria, Turkey and Croatia, therefore we first started with a short study of the economic background of each country in order to be able to build and explain the model. Following the analysis of the macroeconomic situation of each country mentioned above we conclude the following things:

Romania, which is now part of the European Union, has a short history of market economy-two decades-period in which the economy has struggled with high levels of inflation, public deficit, high rates of unemployment. Beginning with the year 2000 it was obvious a sustained economic growth which made possible the implementation of reforms.

The case of Turkey is not much different from the one of Romania, it struggled also with centralised economy, but the demographic aspects made the situation different. After some reforms the economy started to grow but in 2001 it is hit by a crisis. A special aspect of Turkey's economic policies is that during a few years it pursued two contradictory targets.

Another analysed country, Bulgaria, faced with the transition from the centralised economy to the market one had fought high economic imbalances during many years. After 1997 when it adopted a currency board regime, the economy began to stabilize. The 2000's saw a steady pace of growth and budget surpluses but shaky inflation.

With a dramatic history of the 1990's, Croatia begins to show stabilization in the macroeconomic situation until 2006, because of the introduction of the Stabilization Program. Since this year forward the macroeconomic indicators show a dramatic decrease also influenced by the 2008 crisis. From February 2005 Croatia is advancing to full EU membership.

Based on the analysis of the collected data and after processing them in order to eliminate the seasonality using X-12 ARIMA, and looking up for the logarithm for the GDP and HICP, we generated a series of equations from which we chose the most representative at the level of the population, after taking the student t-test. We generated two models for Romania, Turkey and Bulgaria and three for Croatia because we wanted to eliminate the non representative variables.

We observed that the only country in which unemployment has a relevant influence over the HICP is Turkey (and it is an indirect influence), meanwhile the previous values of HICP and

current values of GDP have a direct influence in all analysed countries over the studied period. Bulgaria's situation is a bit different from all the other analyzed countries: the value of current HICP is also influenced by the constant and by the values of (t-3) quarter HICP. Through this paper we tried a simplistic way of analyzing the influence of a few macroeconomic indicators over inflation; therefore this is a basic model that can be significantly improved through the introduction of more complex variables. The results, the similarities and differences between the countries, arise many questions that will be answered through a deeper research and improvement of the model.

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MONEY: FROM STATISTICAL DEFINITION TO MONETARY POLICY FOR ADOPTING EURO.

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The evolution of monetary aggregates is closely related to the economic cycle, especially the evolution of GDP. The study aims to analyse the primary monetary aggregates (M1), the secondary (M2) and the tertiary (M3) in three Central and Eastern European countries: Romania, Bulgaria and Poland. The countries were chosen as follows: Romania and Bulgaria on the basis of the economic and geographical closeness and Poland as a benchmark for the first group. The data used are money supply, monetary aggregates: primary, secondary and tertiary, in Romania, Poland and Bulgaria, for the period January 2004 - March 2011, the monthly series are obtained from central bank websites, Poland's Central Bank and Bulgarian National Statistical Institute. The evolution of monetary aggregates of the three countries was compared with the Euro area and it was noticed a high degree of similarity between countries more developed economically as compared to less developed countries. From the viewpoint of optimum currency areas, it is necessary that the countries that adopt the Euro would respond symmetrically to external shocks and also have similar economic behaviour. Our study aims, in this respect, to analyse the components and the characteristics of the monetary aggregates, as well as the trends existing within them. The analysis of the correlation between monetary aggregates will show how the way in which the monetary mass and aggregates behave and which the sense of connection established between these countries is. We find that Romania and Bulgaria have a similar comportment, the correlation between these being the highest, we observe some differences between Romania and Bulgaria versus Poland.

Keywords: Monetary Aggregate, Gross Domestic Product, Monetary policy, Euro Zone

JEL Classification: E42, E52

1. Introductory notions

The evolution of monetary aggregates is closely related to the economic cycle, especially the evolution of GDP [Fagan, Henry, 1998]. The study aims to analyse the primary monetary aggregates (M1), the secondary (M2) and the tertiary (M3) in three Central and Eastern European countries: Romania, Bulgaria and Poland. The countries were chosen as follows: Romania and Bulgaria on the basis of the economic and geographical closeness, and Poland as a benchmark. The study aims to observe the similarities concerning money supply that exist between these countries and the importance of monetary aggregates as an instrument of monetary policy in these countries. Following the EU accession, these countries will adopt the euro, the forecasts being: Romania - 2015, Bulgaria - 2013, Poland 2012 (2013); The theory of optimal currency areas shows how important is the economic synchronization for countries with a single currency. Within the Economic Monetary Union, the definition of monetary aggregates is stated, since 2007, according to the methodology of the European Central Bank (NBR Monthly Report, 2009):

1. Narrow money supply (M1) includes currency in circulation (banknotes and coins) and deposits readily convertible into cash or used for payment by bank transfer called overnight deposits.

2. Intermediate money supply (M2) includes narrow money (M1) plus time deposits with maturity of up to two years and adding deposits redeemable at a period of notice of up to 3

months. The definition of M2 mirrors the interest in analyzing and monitoring a monetary aggregate which, apart from cash, includes deposits with a high degree of liquidity.

3. Broad money supply (M3) comprises intermediate money (M2), and marketable instruments issued by the monetary financial institutions sector; money market instruments, especially money market fund shares/units and repurchase agreements are included in the aggregate (a high degree of liquidity makes these instruments close substitutes for deposits).

The way of defining monetary aggregates in Romania and Bulgaria before the harmonization with the European Central Bank requirements was:

- M_1 - Narrow money supply, which comprises: currency outside the banking system, sight deposits (until December 1991 time deposits of economic agents as well);
- Quasi-money – which, together with M_1 , form M_2 (broad money) and which comprises: household savings, term or restricted deposits in Lei, foreign currency deposits of residents.

2. Literature Review

The monetary union (or currency union) - means adopting the same currency in neighbouring countries or that of the most important commercial partner; we witness the dollarization in Latin America (Ecuador, Peru) and the euro area. For Romania an important significance has been given by the "euro zone"; now that our country is a EU member, it should focus on continuing the process of integration into European economic and monetary union and the next step is to adopt the euro. Establishing the euro area was a long process that had as its starting point the Delors report of 1989, which proposed a realization of monetary union in three steps. The benefits of achieving a monetary union are related to the existence of an optimal currency areas, optimum currency area is defined as a geographical region in which the member states must use fixed exchange rates or a single currency, while there are also criteria that a country must satisfy to be part of an optimal currency area (Mundell, 1961):

- high degree of labour mobility;
- diversified production;
- degree of openness of the economy;
- symmetry of external shocks.

From this point of view, the European Union is not entirely an optimum currency area, there are differences in labour mobility (in particular because of language barriers). However, joining an economic union and then a monetary union, with the implementation of EU acquis and the liberalization of the movement of labour force showed that the level of integration in the euro area is increasing (Bîtcă et al, 2007), and also that the euro zone economies become integrated as a result of monetary union[Baldwin, 2006].

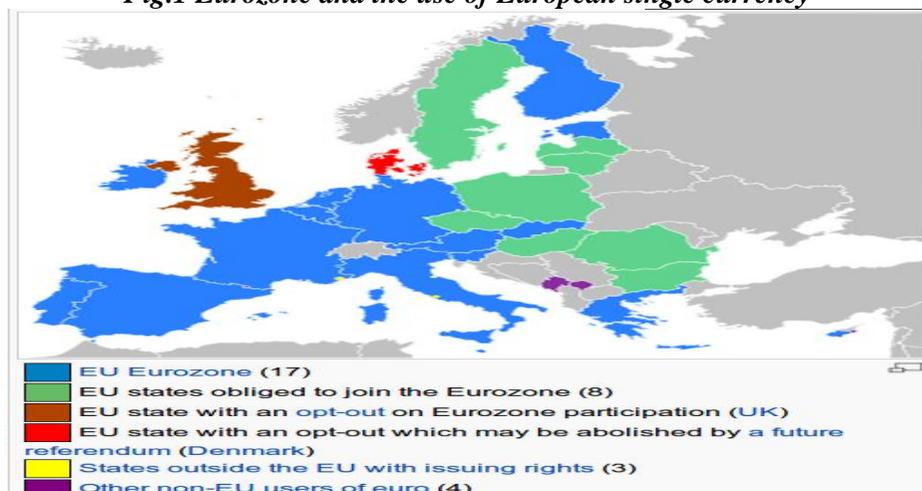
A preliminary stage of adopting the euro is compliance with the provision of the Maastricht Treaty (1992):

- the average inflation rate should not exceed with more than 1.5 percentage points the average of the most performant three members
- the long-term interest rates should not exceed with more than two percentage points the average of the top performing members
- consolidated budget deficit should be less than 3% of GDP
- public debt should be below 60% of GDP
- exchange rate fluctuations against the euro should fall within a corridor of + / - 15% of the average level.

Bulgaria: in 1997, as a result of excessive borrowing, Bulgaria became insolvent, the establishment of Monetary Council was decided in July 1997, the exchange rate level was fixed at 1000 leva for a German mark. The establishment of the Monetary Council has been beneficial in terms of controlling inflation, thus, from the peak of 1044% in 1997, the inflation was reduced

to 18.7% in 1998, 2.6% in 1999, 10.3% in 2000, 7.4% in 2001, 5.8% in 2002 and in the EU pre-accession period (2003-2007) it fluctuated between a minimum of 2.3% and a maximum of 7.3%. Getting over the critical period, which was caused by entering into insolvency in 2000s, by structural reforms and by EU accession in 2007, made Bulgaria to fix its target of joining the euro zone as 2012.

Fig.1 Eurozone and the use of European single currency



(Source: <http://en.wikipedia.org/wiki/Euro>)

Poland: After 2000, the Polish Central Bank will focus on inflation targeting, and is due to adopt the euro by 2014, which supposes compliance with ERM II requirements two years before acceding to the euro area. Poland is a success story, managing the performance to continue its growth even during the crisis.

Romania: After accession to the EU, Romania must abide by the obligations of EU membership and will have to join the euro zone, the time horizon forecast is after 2015, with a period of at least two years preceding that, during which it will comply with the regulations of exchange mechanism of ERM II, which involves a controlled national currency fluctuations against the euro within a deviation band of +/- 15%. Romania meets only one of the provisions of the Maastricht Treaty, namely the public debt and, on the edge, the exchange rate fluctuation. Through the reforms and agreements with International bodies, it is aimed at the reduction of the budget deficit below 3%, while the central bank aims to control inflation, although this year's inflation target will be exceeded.

3. Data used and methodology

The data used are money supply, monetary aggregates: primary, secondary and tertiary, in Romania, Poland and Bulgaria, for the period January 2004 - March 2011, the monthly series are obtained from central bank websites, Poland's Central Bank and Bulgarian National Statistical Institute.

To analyse the evolution of money supply and monetary aggregates in the three countries, we shall calculate the correlation that exists between the evolution of M1, M2 and M3, so the correlation is defined as:

$$\rho = \text{corr}(x, y) = \text{cov}(x, y) / \sigma_x \sigma_y = E[(X - X_m)(Y - Y_m)] / \sigma_x \sigma_y,$$

- where X_m, Y_m represent the mean of X, respectively Y,

- and σ_x, σ_y represent the mean squared deviation of X, respectively Y.

The analysis of the correlation between monetary aggregates will show how the way in which the monetary mass and aggregates behave and which the sense of connection established between these countries is.

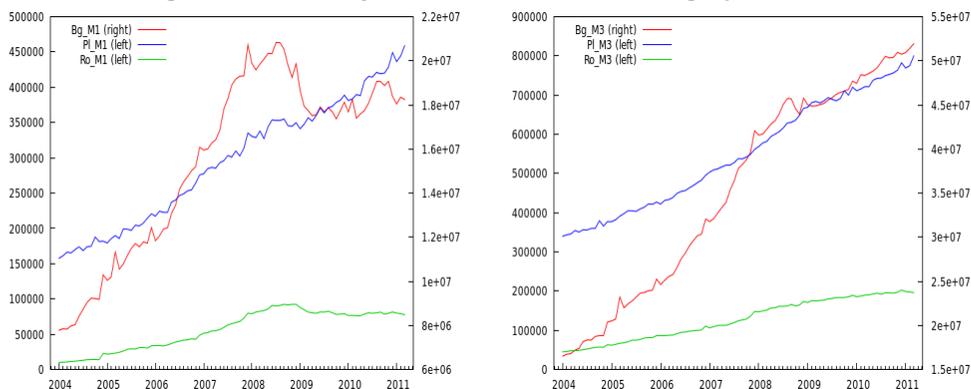
4. The analysis of monetary aggregates (M1, M2, M3) in Romania, Bulgaria, Poland

For these countries, the period analysed is related to two major events:

- European Union adhesion.
- economic crisis.

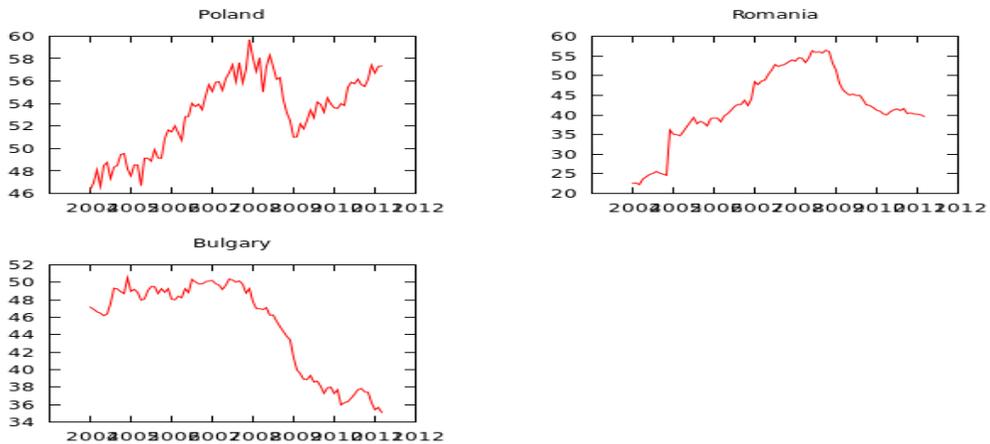
Fig.2 shows the evolution of money supply (M3) and primary aggregate (M1); the money supply in the period under analysis has a growth tendency, consistent with the economic growth witnessed by these countries in the pre-crisis period, except in the case of Bulgaria where from mid-2008 to 2009 the money supply (M3) shrinks due to the decrease in GDP.

Fig. 2. Evolution of M1, M3 in Romania, Bulgaria, Poland 2004-2011



The primary aggregate (M1) has a much more volatile evolution, this being also due to the fact that the assets constituting the aggregate are of the most liquid type, and thus, particularly sensitive to changes in economic climate; with Romania and Bulgaria, M1 decreases, during 2008 for Bulgaria and the at beginning of 2009 for Romania, while Poland is the only country in which M1 growth continues. The evolution of money supply, being closely related to GDP trend, the conclusions drawn show that in both Romania and Bulgaria the money supply growth rate has slowed down due to the downturn. However, the fact the trend is nevertheless positive raises questions about monetary policies in both countries because the excess of money can turn into inflation.

Fig. 3. Primary component of aggregate money supply M1 in total



In terms of the component of the money supply, it is seen in Fig.3 that, for both Romania and Bulgaria, the primary aggregate (most liquid) is below 45% for Romania and under 38% for Bulgaria, much less than in the pre-crisis period (over 50% for both countries) which shows that the economic crisis has manifested itself at the level of non-bank agents, as well, by lowering the amount of cash and the value of sight accounts. While with Romania and Bulgaria M1 is still decreasing, in Poland, after a period of decline of a similar magnitude to that in the other countries analysed, it recovered to levels comparable to those in the pre-crisis period.

The correlation between the monetary mass and the aggregates in Romania, Poland and Bulgaria

To analyse the evolution of money supply and monetary aggregates in the three countries, we calculate the correlation that exists between the evolution of M1, M2 and M3; so the correlation is defined as:

$$\rho = \text{corr}(x, y) = \text{cov}(x, y) / \sigma_x \sigma_y = E [(X - X_m)(Y - Y_m)] / \sigma_x \sigma_y,$$

- where X_m, Y_m represent the mean of X, respectively Y,

- and σ_x, σ_y represent the mean squared deviation of X, respectively Y.

Table 1. Correlation matrix of Monetary aggregates

M1	Pl_M1	Ro_M1	M1
	0.88	0.97	Bg_M1
	1	0.93	Pl_M1
M2	Pl_M2	Ro_M2	M2
	0.98	0.98	Bg_M2
	1	0.96	Pl_M2
M3	Pl_M3	Ro_M3	M2
	0.98	0.99	Bg_M3
	1	0.99	Pl_M3

Based on monetary value and monetary aggregates M1 and M2 between January 2004 and March 2011, their correlation matrix was calculated. Statistically, the correlation of the results of the secondary aggregate (M2) and the tertiary one (M3) shows a close link between the

developments in the case of Romania, Bulgaria and Poland. With the secondary aggregate, the highest correlation is between Romania and Bulgaria or, respectively, Romania and Poland, this showing that the evolution of money supply in our country, on one hand, presents the features of an underdeveloped economy (such as Bulgaria) and, on the other hand, is similar to Poland - a country with a large population.

The most noticeable differences are found with the primary aggregate, the highest correlation is observed for Romania and Bulgaria which shows that these countries have been equally affected by the economic crisis and the behaviour of non-bank agents in these countries was similar, namely a decrease in cash holdings and short-term deposits. The lowest level of correlation is remarked between Bulgaria and Poland which is due to the fact that after the first effects of the economic crisis in Poland, the primary aggregate returned to levels comparable to the pre-crisis period, while in the case of Bulgaria the decline of this aggregate continues.

Conclusions

Explaining money through the statistical definition of money aggregates is, obviously, more than presenting the static situation of monetary aggregates because the level of them is an important objective of the monetary policy, the main criteria which are followed in determining the main monetary aggregates are: the efficacy of the aggregates to be set as an intermediate target for the monetary policy, the controllability that can be exercised by the central bank authority on its growth, the possibility to allow the monetary authority to react quickly entitles us to say that pursuit of monetary aggregates is required for fulfilling the criteria for euro adoption.

The tertiary aggregates are usually more difficult to calculate and also are too narrow to supervise by the central bank so in practice usually its used the secondary aggregate targeting

The biggest differences are found within the primary aggregate, the highest correlation is observed between Romania and Bulgaria; this shows that these countries have been equally affected by the economic crisis and the behaviour of non-bank agents in these countries was similar, namely a decrease in cash holdings and short-term deposits. The lowest level of correlation is remarked between Bulgaria and Poland which is due to the fact that after the first effects of the economic crisis in Poland, the primary aggregate returned to levels comparable to the pre-crisis period, while in the case of Bulgaria the decline of this aggregate continues.

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SUB-SECTION: ACCOUNTING

EXAMINE THE PAST FOR GOING FURTHER: A LITERATURE REVIEW IN THE FIELD OF FAIR VALUE

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The current study is part of the scientific approach being assumed at the beginning of the Ph.D. as the theme "New valence of evaluation in accounting" under the guidance of prof. univ. dr. Dumitru Matis. This article aims to realize a more comprehensive study of relevant literature in accounting with fair value as the main subject. We have built our study attempting to answer the following research questions: How much "fair value activity" has there been since 2008? What research topics are being addressed? Who is leading fair value research? What are the limitations of current research? To achieve our proposed objectives we analyzed two databases (Science Direct and Business Source Premier) during 2008-2011, analyzing in detail a total of 22 articles divided into five specific research directions: international regulations on fair value accounting, fair Value Accounting and Financial Crisis, financial reporting at fair value, the relevance of fair value and fair value versus historical cost.

With this research we try to see "what is known" in the field of fair value so far . In addition to qualitative analysis which we performed to discover the interest of researchers in this field, we conducted a quantitative analysis concerning the reported studies , being divided into research themes, research methodology and year of the article publication. Quantitative research results are those anticipated, that the most "fair value activity " took place in 2008 and 2009, surveys having as main research theme international regulations on fair value accounting.

Keywords: fair value, literature review, research direction, databases

Cod JEL: M41

1. Introduction

Fair value accounting has become a crucial principle of measurement in international accounting, considered by the International Accounting Standard Board and the Financial Accounting Standard Board as the primary basis for assessing future (IASB:2006, FASB: 2008). The debate on fair value, are centered around the trade-off between relevance and reliability.

The ICAEW (2006) recently argued that 'Given the importance of the subject, it has not attracted the interest it deserves'. So we try to improve the literature on this topic by conducting a review of the current state of knowledge of the fair value. Consider to be important such research because it can be a source of ideas, hunches and to explore research question. That is, through finding exemplars of well-executed research, interesting ideas that are not particularly well executed, or gaps in the body of knowledge in a discipline, we can identify possibilities for future research. Literature reviews also help us to avoid "reinventing the wheel" by enabling them to build on what others have done. (Ted Zorn , Nittaya Campbell:). Through this research we try to see "what is known" in the field of fair value so far. In addition to qualitative analysis that we intend to achieve a breakthrough for research in this field, we perform a quantitative analysis of these studies.

2. Research methodology

To perform this synthesis and to achieve the objectives that we propose, we follow **eight steps** that we will describe in the following:

The **first step** we consider the need for proper identification of a specialized literature in this field. The best way to initiate the descriptive analysis of the specialized literature, making reference to what is generating the development of a given research area, in fact the existing application to achieve fair value of research on the industry. (Bonaci C., 2009:39). We consider the large number of articles published in international journals regarding this domain a testament to that claim.

The **second step** of this research, we have formulated specific questions for this approach. So we built the following article following four research article questions: RQ1. How much “fair value activity” has there been since 2008? RQ2. What research topics are being addressed? RQ3. Who is leading fair value research? RQ4. What are the limitations of current research?

The **third step** will be the selection of two databases included in this study (ScienceDirect and Business Source Premier).

The **fourth step** is the selection of articles published in the two databases in the period 2008 - 2011. This period was chosen because in our opinion, the scientific development of fair value gained from the beginning of the financial crisis and implicit with actions undertaken by the committees of international standards regarding this domain. Research was done by the keywords "fair value", being limited to the appearance of these words in the title. We were limited only to those keywords that are directly related to the theme of our research. Even with these limitations, we identified a total of 39 articles that we have introduced in our initial database.

The next step, **fifth**, I have devoted it to the removal of articles. So I have kept only those articles published in academic journals, eliminating those published in magazines. We also eliminated items with the subject accounting in education and debate articles at other articles (paper discussion). After this stage, our sample was reduced to a total of 22 remaining articles.

In the **sixth step**, we analyzed the articles in detail, trying to identify the main directions of research which they pursue. Thus, we have grouped the articles in the research topics listed below. To make this classification we followed the main problems addressed in each item, some items which may be classified in several directions of research. Also within this stage we determined the type of research used.

The **seventh step** is a qualitative analysis of articles selected to be researched. We consider this step as the most laborious and requires a high capacity for synthesis. At this step we assign to the four previously established themes and we made a brief presentation of the aspects reviewed in each article and the conclusions reached by the authors.

The **last step** is the quantitative study on data collected before and after the characteristics that we have proposed to analyze them. Also at this stage we have outlined and conclusions on this study.

3. The main research directions in the sphere of fair value

We consider the most important characteristic examined in this study to be the themes of each article analyzed separately. Thus, the study in detail of the articles contained in this approach, we identified five scientific directions for the research: international regulations on fair value accounting, fair value accounting and financial crisis, financial reporting, fair value relevance and fair value versus historical cost. The objective of this qualitative study, is to achieve a review of the main directions of the research in the field of fair value, highlighting the main aspects reviewed and the results obtained under each theme. We will try, in what follows, treating them with equal importance, the study hoping to fill a gap in the scientific literature and to create the possibility of identifying new research leads.

3.1 International regulations regarding fair value accounting

We accept the idea that expanding the use of fair value is correlated with of the widespread application of IFRS, either through convergence of national accounting systems, either by explicit requirements for listed entities. A rich academic literature has treated the subject of fair value accounting from diverse perspectives, conceptual or empirical approaches, especially in fair value accounting under international standards.

Using cash flows as a proxy for managers expectations, having as sample, all firms listed on the New York (NYSE), American (AMEX), and NASDAQ markets, for which financial requisite and return data are available over the period 2002–2006. Henry Jarva demonstrated that goodwill write-offs under Statement of Financial Accounting Standards No. 142 (SFAS 142) are associated with future expected cash flows as mandated by the standard. Additional analysis reveals that the association between goodwill write-offs and future cash flows is insignificant for firms with contemporaneous restructuring.

Various studies shows skepticism regarding the benefits of using fair value. The main reserves result from volatility and risk that it induces in relevant decisions by stakeholders. It is known that the evaluation has no guarantee period, has an extremely limited validity, given the volatility of market information. Thus, Peter Fiechter, using a sample of 222 international banks from 41 countries, conducted a study that examines whether the fair value option affects earnings volatility. In contrast to other studies that associate higher levels of earnings volatility with fair value accounting, this article has led to the conclusion that banks using fair value option accounting mismatches exhibit lower earnings volatility than other banks. Peter Fiechter stated that "Purpose of this paper is to provide further insights regarding the determinants of the decision to apply the FVO under IAS 39, and the effects of optional fair value accounting on the volatility of bank earnings around the world."

Geoffrey Whittington considered fair value having a central place in the conceptual content. Thus, in his article analyzed the controversy raised by IASB and FASB project by creating a conceptual framework for financial reporting concerning fair value. He raised specific issues, namely the fair value determined by the definition, recognition and measurement of it. In individual case, George J. Benston the deficiencies treated in fair value within SFAS 157.

FASB, through the Statement of Financial Accounting Concepts (SFAC), No.2 "Qualitative Characteristics of Accounting Information " (1980), indicate that relevance and reliability are primary Qualities of accounting information. Thus, Preeti Choudhary investigates reliability differences across recognition and disclosure regimes to shed light on differing incentives and reporting of employee stock option fair values . He concluded that different companies treat employee stock entry and exit, with a tendency to decrease the value of the input.

David Cairns et al. tested by using the fair value on 228 firms listed in the UK and Australia, around the Adoption of IFRS from 1 January 2005. The results are not surprising, concluding that fair value is not used in areas where its use is optional.

3.2 The relevance of fair value

Barth claimed that value-relevance tests are usually joint tests of relevance and reliability, where reliability is more than an agreement about the measure (measurement verifiability), but also involves the correspondence between description, classification and presentation (representation faithfulness), of the phenomenon it propose to represents.

Chang Joon Song, Wayne B. Thomas and Han Yi tested the relevance of fair value to all its levels, as presented in SFAS 157. The results are those expected, namely, in level 3, fair value is less relevant than the other two levels.

Stella So and Malcolm Smith have tested the relevance of HKAS 40 (2004) 'Investment Property' on the presentation of changes in the fair value of investment properties and the results of this

study show a significantly higher market price reaction and returns association when changes in fair value of investment properties are presented in the income statement.

3.3 Fair value and financial crises

Along with the awareness that the global financial crisis is going through, there are more intense discussions about role of financial information and in particular about financial reporting, taking into account to fair value. Questions arise concerning the role previously played by fair value triggering the crisis and then during its fall on market values, or concerning how it can reflect the performance management and can benefit the relationship between the manager and users of accounting information

The first reaction in current crisis is to blame fair value, which essentially is just a messenger, like Paul Andre et al. said. Indeed, it is easy to say as because using a of fair value basis of valuation, real estate prices artificially increased, banks giving mortgages easier. Among proponents of fair value, including Nicolas Veron, says that fair value is the wrong scapegoat for this crisis.

3.4 Financial reporting on fair value

The concept of fair value accounting is supposed to improve the quality of financial reporting. We emphasize the size, direction and significantly influenced in the fair value over financial reporting and decision-users.

Taking into consideration that fair value reporting influence investors' decisions, managers are tempted that when there is no active market for an asset to intentionally deform information concerning assessment of the assets, which leads to a deformed evaluation of the asset value, as demonstrated by Ruth Ann McEwen, Cheri R. Mazza and James E. Hunton through a survey-questionnaire. Same influence over analysts' managers in determining the value of assets is proved by Karl J. Wang in his study.

4. The quantitative analysis of the studies

Distribution of articles included in the sample analyzed on research topics, namely, the years in which were published, identified in the field of fair value, are shown in these figures:

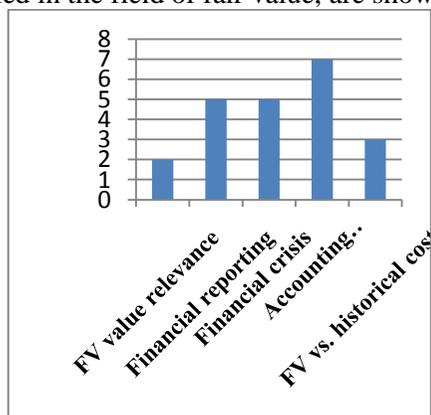


Figure 1:

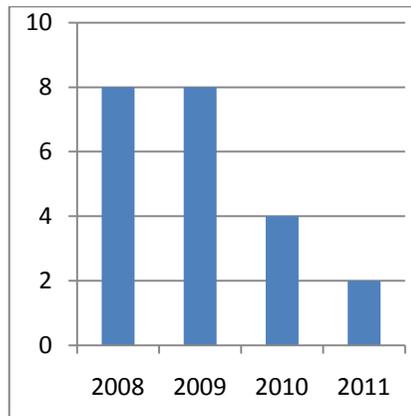


Figure 2:

Distribution of articles on research themes

Distribution of articles by year

Looking at Figure 1 above, we can see a high interest of researchers for "international regulations concerning fair value accounting, which is not surprising considering that extend use of fair value is correlated with the widespread application of IFRS. Looking at Figure 2, we see that in the years 2008 and 2009, this situation can be explained through an increase desire to adopt, both, internationally and nationally a modern accounting system, characterized by increasing concept of "fair value". Also the large number of articles published in 2008 and 2009 can be explained by the economic crisis, which has increased the "popularity" of "fair value".

Regarding the distribution of articles on research methodology, this is equivalent, and namely 11 articles are quantitative, and 11 articles are qualitative .

5. Limitations of research

The study conducted is not without bounds, and we consider to be the limits of our present approach: the extent of the analyzed period of only four years, the sample included only two databases, and it was limited to those items that were selected on the basis keyword "fair value", a greater number of keywords resulting in an extremely comprehensive and difficult sample to be analyzed.

6. Conclusions

Given that, with our knowledge, a study on literature review does not exist in the field of fair value accounting, we believe we have brought a contribution to improving the literature in this field. Considering all aspects examined, we believe we can answer questions addressed at the beginning of the paper, namely: starting with 2008 we can state that the field of fair value has grown pretty much, mainly focused in five directions of research: international regulations on fair value accounting, fair value accounting and financial crisis, financial reporting, fair value relevance and fair value versus historical cost. Given the research findings and conclusions based on them, which we have presented above, we consider that the objectives we set at the beginning of this paper were carried out.

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ACCOUNTING AND CREATIVITY: A SOCIOLOGICAL AND PSYCHOLOGICAL APPROACH

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This article presents aspects related to creativity in accounting. In our approach we started from theoretical aspects regarding the position of accounting in the field of scientific knowledge. The paper aims to justify these positions (as a language of communication, communication tool, social game), and from there to mirror the way of expressing creativity in accounting.

In terms of research methodology, we have appealed to a qualitative research inspired by sociology and psychology.

The sociological survey shows the vision of society related to creators, the way in which it admits or rejects them. The sociological approach allows us to understand the importance of collective consciousness in assessing and maintaining the creation.

The psychological study regarding the creator describes a creature endowed with an excessive sensitivity, accompanied by a worker with permanent activity, but who is constantly gripped by an "existential doubt". In conclusion, the consultant or the researcher will have to recognise the creator's right to be wrong and surround him with a climate of confidence.

This paper shows that there is a path where the one who talks to numbers (and does not have the skill of words) and those who possess the mastery of words actually meet.

This paper is part of the PhD research entitled: Identifying and motivation of creative accounting practices – the case of Romanian listed companies, carried out under the guidance of PhD Prof. Feleaga Liliana, research carried out within the framework of the Bucharest Academy of Economic Studies.

Keywords : language figures, social game, creative approach, creative accounting, human capital

JEL Classification : M 41

1. Introduction

This paper is part of the PhD research entitled: Identifying and motivation of creative accounting practices – the case of Romanian listed companies, carried out under the guidance of PhD Prof. Feleaga Liliana, research carried out within the framework of the Bucharest Academy of Economic Studies. The research theme approached in this article makes reference to the existence and the manifestation forms of creation within a company. Lately, a series of companies have asked the question regarding creation within organisation and tried first to identify and manage creation through intangible capital. However, in real life, creation seems to be excluded from the accounting and the control system of the enterprise. But can it be excluded within the enterprise? Apparently the answer is yes. However, the industrial revolution and the enterprise were the first to give a particular status to creation and creator.

Research methodology

In drafting this paper we have appealed to a qualitative research inspired by sociology and psychology. The sociological approach allows us to understand the importance of collective consciousness in assessing and maintaining the creation.

The psychological study regarding the creator describes a creature endowed with an excessive sensitivity, accompanied by a worker with permanent activity, but who is constantly gripped by an “existential doubt”.

Whereas one of the characteristics of the late twentieth century is precisely the worldwide dissemination of information, the distribution and access to information implies strategic and organisational changes. These changes have caused an increase of the share of immaterial. Through this work we tried to show that there is a path where the one who talks to numbers (and does not have the skill of words) and those who possess the mastery of words actually meet.

2. From numbers and communication language towards the information system

Accounting is the main source of information available to enterprises. It is required both for local enterprises as well as for those that operate on multiple continents. This universality of needing the accounting act calls for the universality of another system, that of communication language.

Language is not required by a decree, it bursts spontaneously, develops in small steps and is progressively structured, managing to establish a logical coherence that can be understood, explained and taught a posteriori. This is the case of accounting, within which has developed an accounting process (this explains why the accounting process is inductive rather than deductive.)

On one hand, just like any idiom, accounting has its own language and is subject to principles, regulations and standards. These principles underlie the accounting system in all countries. However, interpreting and transposing them into regulations and standards may constitute an approach that varies from one country to another. For example, the principle of prudence depends on the social and cultural context which can lead to incomparable results between a French company and a British one of the same size and belonging to the same business segment. Thus, one might ask, is it really necessary a single language with the same principles, regulations and standards, or is it possible for multiple languages to coexist? These questions were put forward regarding the international normalization and thus, a common language was chosen.

On the other hand, just like any type of language, accounting is a communication tool.

First, both at national and international level, accounting favours a form of expression (a conceptual framework), according to its speakers. In the U.S., the information is aimed at investors and the conceptual framework is an economic one. Secondly, accounting favours a form of expression that takes into account regulatory constraints, shaping the content or the form of financial statements within the target of a particular outcome (reducing losses, increasing the results - this technique is called “window-dressing” or “creative accounting”).

What is the purpose of accounting? Colasse (1996) defines accounting stressing that it “is not a simple technique for recording facts in the process of the enterprise, the accountants get involved, are invested and bring their own interpretation of reality and vision in what concerns the enterprise. They offer that vision they appreciate as compliant with defending their interests in the context of relationships they maintain with other economic and social actors.” By taking part in building a reality, accounting creates an image of the enterprise, while still being aware there are several interpretations.

Accounting is language and due to this language it projects a picture of the economic reality. This image is built by taking into account events (Lambert and Sponem, 2005) or taking the events into consideration, in terms of accounting, invests it with an economic existence

Within a company, “the management tools”, especially accounting, are not considered to be noble, but because the figures may be placed in the center of any organisation, this results in changes made within the organisation, even within the company.

According to Supiot, expert in labour rights, “the reign of figures has come to replace the authority of law” : “Even the States have come to obey the same operation regulations followed by the enterprises that operate on competitive markets. I mean they have to respond to encrypted

signals, which, just like market prices, would represent a true picture of the world in which it operates. This doctrine has strongly influenced the reforms adopted over the last ten years within the public segment, in the name of “governance”, management.” (Supiot, 2010:83)

Supiot draws attention that “measuring” should not be mistaken for “evaluation” as this could lead to “a loss of the sense of measure.”

The fact that a lawyer is interested in managing numbers and accounting issues shows that figures are placed in the centre of any organization. Although management sciences are still in an early stage, they are interacting with other social sciences (sociology, economics, law), paradoxically influencing these other sciences.

This “language of numbers” can lead us towards a financial heritage to the disadvantage of a cultural one. But managers’ paths often meet other paths, resulting in alternatives to the “language of numbers” which may inspire some people to use it as other possible resources.

The language of numbers requires a person to “listen”, an interlocutor; it makes no sense only if “the Other” is there. Often while handling management issues it is said that sensitivity does not belong there. However, we have to think using all sensitivity we can get in any event to listen, to see, to feel the presence of “the Other”. Just like a human adventure, the scientific adventure feeds on emotions, metaphors, philosophical, cultural and metaphysical references. This way it can be noticed the essential role played by this emotional part in elaborating, accepting or rejecting new ideas, in indifference or enthusiasm evoked by their implications. “As an accountant, the author states, numbers are talking to me, but I need to translate them into words and phrases.

Making reference to the pragmatic side of accounting, it is seen as an information system that favours the production and dissemination of information while making a decision. At the level of an organisation, according to Ionaşcu (2003:33), accounting is the most important element of the information system, because: i) most microeconomic decisions are taken based on information provided by accounting, ii) it allows managers and external users of information to get a picture of the whole organisation, iii) connects with other components of the enterprise information system by integrating information regarding these activities in a common data base.

3. Accounting – a social game

Certainly, accounting is the product of social history. Is it possible to have an impact on social history? Taking into account that there are several images of economic representation, accounting evokes revealing items, especially in its moments of silence or when it does not take into consideration the events in question.

Starting from the definition of social sciences as cultural sciences that deal with a person’s activities as member of a group, accounting is a scientific discipline in the field of social sciences because: i) it is a creation of the human being as a response to certain practical needs; ii) reflects events, activities and social actions; iii) it sets as target different groups of users that are part of society; iv) produces financial statements that provide information for making decisions which have an impact on individual behaviour; v) it is influenced by the economic, social, legal and political environment, i.e. social phenomena.

The accounting model that reflects a social organisation is part of the current created by Hopwood, along with the magazine “Accounting, Organizations and Society”. For them, analysing accounting means understanding its share of social vision: What is the role of accounting in achieving what the participants within an organisation consider to be necessary and possible? Can it take part in creating particular concepts of organisational time? If the answer is positive, then what are the effects? How and when does the accounting of organisational performance give rise to action? How does accounting contribute to the establishment of an organisational mission and by which means the partial and private schemes of organisational

visibility that it creates facilitate the taking over of control within the organisation, in technical or social terms? In what way does the information provided by accounting in an ordinary (routine) manner stay in contact with the multitude of information fields at decision-making level that characterizes the life of the organisation? In other words, is it possible for accounting to gain significant organisational valences? (Richard, 2005: 259).

Hopwood proposes analysing accounting from organisational and social point of view. In his case as well as in that of other researchers, accounting is a social and organisational phenomenon. It interacts with the historical, social and organisational framework so that nature can be defined only in relation to this framework.

The social role of accounting is given by the fact that based on accounting information which is the most important element of the organisation's information system, decisions are taken and they affect the wealth of individuals and social groups. Thus, accounting has become a "social game", involving many participants (managers of enterprises, financial intermediaries, shareholders, creditors, etc.). Also within it, rules are distinguished (imposed by the courts of accounting normalization that exist on a national and international level) and a stake, represented by wealth. The winners of this game are those who are better informed and possess relevant and reliable accounting information.

4. What is creativity in accounting?

To meditate on the relationship between management and creation means working on paradoxes because it is hard to value immaterial and the one who takes the risk of doing it does not know if the investment brings the expected result. Is it true that in accounting the number is the center of any decision, but can we depreciate the value of a creation due to the fact that it does not produce any financial value? In the field of creation, the managers are in a difficult position, that of justifying the choices they make (does a certain author deserve to be published, do we continue to publish his books? etc.), thus the manager finds himself in the position of a "creation guide".

Because accounting encounters difficulties in valorising creation, the manager asks questions on this tool. He is forced to make up, to give a value to a certain extent. He becomes aware of the valorising impact when he communicates it. After this first stage of valorising, the manager is able to present the situation to the management, employees, and shareholders. Next is the third stage; here the manager knows that through accounting he can speak the language of employees, shareholders and owners. He realizes that management provides an image to organisation, but meanwhile it also gives value to the participating parties. He understands that in order to invest, he must "believe" beyond the barriers of logic and he realizes that accounting tools offer a social vision with the ability to build. Focusing on creation means to become aware as an artist, scientist, that they may have an innovative idea which, even when it is materialised, it needs "the Other" who will support his project by presenting it to the organisation or the outlet. It is a cooperation assembly.

However, creation belongs to this invisible part, inaccessible to accounting, which may create a conflict of non-commercial values; that is why the manager's role as "creation guide" becomes important, being able to promote creations on the commercial market, even if these do not make profit in the sense of the market. These managers are necessary to create a cultural field, relying on the financial segment. All of these supports the idea of creating other possibilities of expressing the language of numbers, supporting the creative act which aims to awake the human conscience. In this context, management appears as a pertinent way allowing us the access to this "essential", currently in creation. Management shapes a social and economic model.

In accounting, creativity has been locked, from legal perspective, as in the case of patents (inventions), but on the other hand, the creative aspect of accounting is strongly emphasized, being identified and evaluated in the case of information systems. In France, the activities that are

related to creation are either registered as sales services rendered "Charges" or as intangible assets (paying rent, research and development costs, concessions, licenses, trademarks, software, similar rights and assets, goodwill). Research and development costs are included exceptionally in the balance sheet of the enterprise or organisation.

The costs involved by the project may be recorded in accounting on the assets level, if they refer to net individualised projects which clearly show the guaranteed success in the commercial and technical profitability. Costs related to research are recorded in sales services rendered.

However, paradoxically, the more a company is investing in internal development of creation, the faster it decreases its potential in terms of accounting.

If in what concerns accounting, it is a language, could it be possible to take into account this intangible process that contains a grain of creation? Indeed, generally speaking, one of the characteristics of the late twentieth century is precisely the worldwide dissemination of information. The distribution and access to information implies strategic and organisational changes. These changes cause an increase of the share of immaterial. "Immaterial" may take different shapes: the intangible immaterial as "brand", quasi-tangible as software, formal reproducible as "logo" which can be reproducible, in the patent case between sustainable and instantly and audience fee or the market, science, expertise, skill, professional training and creation share.

All members, clerks and managers of a company may be appointed by the term "human capital", but this capital is more important than the sum of all these elements. The notion of "human capital" needs to define the intelligence and dynamics of an organisation located in an environment that is in constant evolution. Human capital also means the creation and innovation of the organisation. Structural capital of enterprise is simultaneously the expression of human capital and its infrastructure. It can be breakdown into three categories: organisational capital, innovation capital and process-capital. Intangible capital may be detailed in the appendix which is part of the synthesis documents that form a unit, together with balance sheet and income statement.

Accounting generally remains very discreet in terms of creation. However, a number of companies have asked the question regarding creation within the enterprise and have tried, first of all, to identify and manage creation by means of intangible capital. However, in real life, creation seems to be excluded from accounting and control system within the enterprise. Can it be excluded within the enterprise? Apparently the answer is yes. However, the industrial revolution and the enterprise were the first to give a particular status to creation and creator.

One of the major criteria of intangible capital and, especially, that of creation, is to be regarded as unsafe, difficult to quantify and assess.

There are researchers who describe the "need to believe", especially in those decisions related to investments in the intangible capital area. "The analysis of investment logic in terms of innovation leads to a paradoxical finding. Economic constraints restrain the enterprise's actors (decision makers) from implementing resources that will allow them to put activities to some efficiency tests (tests, barriers): cost-effectiveness and profit are the purpose of the capitalist enterprise. But treating constraints implies in the dynamics of innovation a large part of beliefs, "magical thinking" (Alter 2000:35)

How much can someone interfere with the creativity management? What attitude may be taken towards creators? The two stories that are presented below, seen by Le Theule (2010:81), will help us give an answer to these questions:

"To have one's head in the clouds" or how came to life the chaos theory?

Who has not walked besides a person that looks at the clouds, that he felt like floating in another world, different from the one we call "real"?

Who has not walked besides a human being, a woman, a child, who bends to pick a thrown piece of paper shouting: "It's going to be a wonderful postcard!" When we are able to manage to get out of the daily routine chain and have a look at this piece of paper, meant to be thrown, as a possible postcard, it is only then that we can feel this object is truly unique and special.

Creator is precisely this person "outside the world", who lives without sensing that he chisels the regulations in force. It is revealing the case of Feigenbaum, the physicist who invented the chaos theory. He walked by starlight and meditated on the clouds he saw from an airplane window, creating real scientific corridors above the laboratory and, while meditating on these matters considered to be unproductive, actually he was about to develop the chaos theory.

"An eccentric people" or how can we favour random growth?

It's about the experience lived in the 1950s, within the "acquiring human brains" enterprise in U.S. Air Force, reported by Nasar, the main protagonist of this experiment. He devised a plan which favoured "casual, accidental encounters". He believed that people, scientists, mathematicians, had to be left to work quietly, without external constraints and he completely believed in the basic research. People around him had the impression that this section of the enterprise was populated by eccentric creatures who acted freely, without being controlled in any way, without formal approval to publish a memoir.

Taking these two examples as point of departure, can be underline the importance of the role that a consultant and other decision actors within the company have in connection with the promotion of creators and creative organisations.

5. Conclusions

Philosophical, psychological and sociological research on creation, that were discussed previously, allows us to elaborate a more specific study on the role played by the researcher compared to creators, to perform a symbolic recognition of creators and to accompany them step by step on this complex path of creation and innovation.

The sociological survey shows the vision of society related to creators, the way in which it admits or rejects them. One of the first roles of the consultant and researcher is to symbolically acknowledge the creators, to stop labelling them as "dreamers". This will allow them to gradually be accepted by the social body of the enterprise. The psychological study regarding the creator describes a creature endowed with an excessive sensitivity, accompanied by a worker with permanent activity, but who is constantly gripped by an "existential doubt". In conclusion, the consultant or the researcher will have to recognise the creator's right to be wrong and surround him with a climate of confidence.

The sociological approach allows us to understand the importance of collective consciousness in assessing and maintaining the creation, therefore, the consultant has also the role to create a link between company and creator, to cause, even generate empathy from society. The role of the creator's companion possessed by other actors of the organisation approaches a form of control, but it should be viewed in a different aspect from the classic one. (that of result standardisation). It is about a "laxative" control, based on confidence in the creator's self-control ability.

Paradoxically, the creator needs complete freedom, but at the same time he needs support from society. On the other hand, accounting is a complex pattern of representation, a social object, but at the same time, taking into account Foucault's analysis (1969), on this pattern, he invites us to take a look at those issues that are hidden by the pattern, made invisible. According to researchers, such as T. Porter, objectivity defined by numbers tends to impose over the objectivity determined by a person's intrinsic qualities. Let us meditate upon Antoine de Saint-Exupéry's *Little Prince* (1946): "I have serious reason to believe that the planet from which the Little Prince came is the asteroid B 612 ... If I have given you this number, I did it because of the grown ups. Grown ups like numbers."

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CHALLENGES OF ENVIRONMENTAL ACCOUNTING AND TAXATION IN ROMANIA

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Environmental problems that have arisen all over the world are concerning many controversial aspects that were created due to the advance of industrialization in tandem with scientific and technological development. For solving these problems, in the past 40 years many international and national organizations have adopted a substantial and diverse range of environmental measures aimed to improving the quality of the environment. Our research aims to highlight how Romanian authorities face the problems regarding environment. To accomplish our objective we trace two main directions of the study, firstly we conduct an analytical investigation of green accounting regulations and secondly we describe the environmental fiscal policy at national level and their impact on Romanian companies.

Keywords: environment, green accounting, fiscal policy, regulations

JEL code: M41

1 Introduction

The correlation between accounting regulations and the taxation system is well known and a matter of common knowledge: accounting must reflect tax obligations and, conversely, tax regulations refer to book profit when defining the taxable portion of a company's income and to report the financial statements. Always for accounting there was a problem regarding its conciliation with taxation. The tax principles aim to stimulate or inhibit certain activities. Directive IV of the Economic European Community (EEC) established interaction between the accounting and the fiscal right. This is achieved through fiscal management of the company (Stoian, 2001).

In this context of interdependence, a more profound study of new accounting practices and tax incentives beneficial to the environment is required, and this analysis forms the basis of this article.

2 Brief framework and literature review

Many internal and external users present an increased interest from the environmental performance of organizations, particularly companies in the private sector (e.g. employees). The types and intensity of pressures on the environment varies from country to country and between different economic sectors. Pressures on the environment concerned organizations seeking new ways, creative and efficient in terms of cost, to manage and minimize environmental impact.

Environmental accounting is a concept often used in different contexts:

-evaluation and presentation of financial information about the environment in the context of financial accounting and financial reporting;

-evaluation and use of monetary and physical information about the environment in the context of Environmental Management Accounting;

- estimating the costs and impact of the external environment when reference is made to Full Cost Accounting;
- accounting for stock and flow of natural resources in the context of Natural Resource Accounting;
- aggregation and reporting of accounting information from the organizations in order to draw up national accounts;
- monetary and physical information on the environmental context in diversity of accounting.

Environmental values are beginning to be reflected in business accounting. A lot of papers developed the environmental accounting, as a real challenge of each country regulations (Jao, 2000, Yonkova, 2008, Caraiani et al. 2001, Blidisel et al. 2009). The Romanian literature points out the new tool in environmental management – the Environmental Managerial Accounting, defined as the identification, collection, estimation, analysis, internal reporting, and use of materials and energy flow information, environmental cost information for both conventional and environmental decision-making within an organization (Sendroiu, Roman and Chitu, 2006). Also, another literature emphasizes the integration of the environment in national accounts (Dachin et al., 2005).

4 Research development and methodology

The research is based on the environmental accounting and economic environmental protection methods debated on the European Union regulations.

4.1 Environmental accounting

Environmental accounting is already becoming part of the business strategy of companies with advanced environmental policies, with the objective of promoting transparency and providing the investor with a greater quantity of relevant information. The international literature conducted in European Community stays that it is not yet obligatory to disclose this sort of accounting information in all fields, binding agreements existing only in certain sectors, such as the electrical industry, where all parties are obliged to make provision for environmental risks and the impact of investments relevant to the protection of the environment are recorded in the annual report.

The European Union recommend to encourage business to publish environmental information, many countries making a step forward to approve regulations for recognizing, assessing and making public elements relevant to the environment in annual accounts (e.g. Spain).

4.2 Economic environmental protection measures

Public initiatives on the environment have been created in many different areas across the diverse world of finance, as: environmental taxation, emission permits and green certificates. Apart from their environmental objectives, they are all economic measures.

Starting from the international approach regarding the environmental accounting and economic environmental protection measures, we want to research the implementation of the Romanian environmental regulations both in accounting and in tax field. Therefore, we want to stay the impact and the most important measures taken by Romanian companies in order to divulge the environmental indicators.

The research methodology is based on a qualitative approach, pointing out the most important Romanian regulations and the impact upon companies that are active in the oil gas, pharmacy and minerals industry, as well as ecological education starts made by Romanian companies.

The main research directions are:

1. The relationship between accounting and environmental protection economic measures;
2. The influence of environmental accounting on the amount of corporation tax paid by companies;

3. The importance of environmental taxation in accounting practices and environmental accounting;
4. The importance of other economic measures in accounting;
5. Corporate change brought about by new accounting and tax-based measures of environmental protection;

5. Research findings and discussions

In Romania, the incorporation of an environmental protection policy was a fact of the discussions for Romania's integration in the European Union. The policy of environmental protection was forecast in Chapter 22- Environmental Protection; this document was approved by the Romanian Government on 18.10.2001. Through The Treaty of Romania's Adherence to the European Union there was planned the implementation of a communitarian acquis in the field of environmental protection until the date of adherence with some exceptions for which there was requested a transition period.

The Environmental Protection Law, modified and completed in 2002, states the way on how the assessment of the environment must be made, the regime of chemical substances and dangerous chemical compounds; the toxic wastes; the pesticides; nuclear activity; etc.

Romania joined the common objective of the European Union on sustainable development, purposing in this respect to achieve goals that will lead to pollution limiting and the effects of climate change on environment, such as a reduction of 8% of greenhouse gas until 2012, compared with 1989, and achieving a progressive reduction of emissions of sulfur dioxide, nitrogen dioxide and volatile compounds.

In the sectors of activity that generates pollution, the transport sector is the most evident. The auto park age (which, as is known in Romania is an average of 13 years) influence the emissions. Therefore, there are adopted the most effective instruments to stimulate the renewal. Considered appropriate to the other Member States (Netherlands, Greece, Hungary, Denmark, Finland, Portugal, etc.), Romania has established a system of charging vehicles during the first registration of its territory, in order to encourage purchases of machines with its latest manufacturing and less polluting.

5.1 The relationship between accounting and environmental protection economic measures

The correlation between accounting regulations and tax rules is well known: the accounts of businesses must reflect tax obligations, and fiscal regulations refer to companies' book profit - with certain modifications - in calculating the amount of corporation tax to be paid. New accounting techniques also respect this parallel relationship.

Environmental accounting is still barely represented in accounting regulations, but International Accounting Standards have already laid down some indirect guidelines which "will have an effect on the payable amount of corporation tax". In Romania, the National Accounting Regulations, adopted through the Ministry of Public Finance Order no. 1752/2005 for the approval of accounting rules in accordance with European directives does not contain any information regarding the reporting of the environmental protection costs. According to the GO no. 25/2008, the ordinance amending and supplementing Government Emergency Ordinance no. 196/2005 on the environmental fund, starting from 1 January 2009 every trade company that distributes plastic bags will have to pay an amount for each distribute bag, even for the free bags. New bag tax that applies only to bags made of non-biodegradable material, will be shown separately on the sale documents and should be declared and paid monthly by traders to the Environment Fund. Moreover, the Ministry of Environment will check how the commercials display in visible places the amount of tax.

The objective of introducing new eco-tax is mainly to discourage the free distribution of bags, which usually leads to waste and environmental pollution, excessive consumers using this type of packaging. Also, several problems related to the assets, the liabilities and the environmental costs are treated in IAS/IFRS and by analogy, could be implemented by Romanian companies.

5.2 The influence of environmental accounting on the amount of corporation tax paid by companies

As in the case in many of European countries, like Romania, the corporation tax calculates the taxable portion of corporation tax by referring to the book profit (as a difference between total income and total expenses, subject to certain alterations arising from temporary and permanent differences. In Romanian regulations the accounting profit is decreased by the non-taxable income and is supplemented by non-deductible expenses (according to the Tax Law no. 571/2003).

The influence on the amount paid by companies in corporation tax permits in Romania, according to the current regulations (Fiscal Code from 2003) the deduction of expenses incurred for the purpose of taxable income, including those regulated by normative acts in force. Through the expenses incurred for the purpose of income are also the expenses for environmental protection and conservation. Also, according to Fiscal Code "Tax payers authorized to conduct business exploitation of natural deposits are required to record in the accounts and deduct provisions for the affected land restoration and to reintegrate them into the economic, forestry or agriculture, to a rate of 1% applied on the difference between income and operating expenses, throughout the duration of the exploitation of natural deposits. For holders of petroleum agreements, conducting oil transactions in perimeters which include marine areas with water depth greater than 100 m, the rate established for the provision of decommissioning probe, demobilization installations of annexes, and to rehabilitate the environment, is of 10% applied on the difference between revenues and expenditures recorded for the petroleum exploitation period."

Furthermore, the development of environmental accounting will enable the genuine useful lifespan of initiatives intended to protect the environment and so that its amortisation can be realised in a manner appropriate to the current conditions, which often do not correspond with the criteria quoted in the "amortisation index chart" that appears in the Romanian tax regulations.

5.3 The importance of environmental taxation in accounting practices and environmental accounting

The importance of environmental taxation in accounting is limited, an example of this is to be found in article 4.6 (g) of the EC Recommendation of 30 May 2001, "the following disclosures should be provided in the notes: [...] government incentives related to environmental protection received or entitled to by the company. The accounting treatment adopted should also be disclosed."

It seems clear that the payment of environmental taxes reveals information of great importance in awareness of the situation in which business finds itself regarding environmental questions (and the further economic implications of this situation). Moreover, in some cases the payment of environmental taxes may be related to the existence of public services whose use reduces environmental damage (circumstances which may be considered on calculation of certain provisions for environmental risks).

At the end of December 2008 in Romania a new legislation applied regarding the environment (GO 1607/December 2008 amending and supplementing the Order of the Minister of Environment and Water Management no. 578/2006 approving the methodology for calculating contributions and taxes due to the environment fund).

5.4 The importance of other economic measures in accounting

Both greenhouse gas emission permits and green certificates that are bought and sold by businesses will be reflected in accounting. On this point it is important to note that these certificates have a bipolar economic nature. On one side they represent productive contributions in that in both cases they endorse raw materials used in the production processes; in the case of greenhouse gas emission certificates, they endorse the combustion of fossil fuels; in the case of green certificates, they endorse use of energy in such processes, regardless of its source, for the value authorised by the certificate. And what is more, both are commodities negotiable on the secondary market or, what effectively amounts to the same thing, financial assets which can be used to underwrite investments. All in all, both aspects must be taken into consideration when calculating their effect on business accounting.

The accounting implications of such certificates, when bought by companies with regard to the environmental impact of their actions, is discussed in the aforementioned EC Recommendation of 30, consideration 18, which states, if "they have been acquired for valuable consideration and, in addition, they meet the criteria for recognition as an asset laid down in paragraphs 12 and 13, they must be capitalised and amortised systematically over their expected useful economic lives. If not, they should be charged to the profit and loss account as occurred".

5.5 Corporate change brought about by new accounting and tax-based measures of environmental protection

Environmental accounting is beginning to be used as a key instrument in managing corporate resources as it gives businesses more complete information on the genuine cost of their activities, including as it does in its estimate models of sustainability. A short term ignorance of the environmental consequences of cost cutting measures can get to a longer term faced with the obligation of paying considerable sums of money to repair the resulting environmental damage. Furthermore, would result more responsible management of environmental issues not only in avoiding environmental damage, but also in more efficient management, optimising use of resources, with the resultant savings in costs.

6 Conclusions

Environmental values are starting to be reflected in corporate accounting, creating a new network of relationships developed between environmental accounting and economic measures of environmental protection. Putting together these relationships and external consequences, starting with discussion of the correlation between green accounting and environmental taxation permits to analyse the influence of new economic environmental protection measures - namely emission permits and green certificates - on corporate accounting.

Environmental responsibility, whether required by law, contracts, or self-imposed, should appear on the balance sheet, as recommended by the corresponding regulations. Environmental expenditure should be, according to circumstance, capitalised and amortised within the period of their useful life when certain criteria are met (essentially if they form a permanent part of the company's activities, if they are concerned with the gaining of future profits or reduce environmental damage within their useful life) or written off directly in the profit and loss account. Conversely, according to IAS 41, "biological assets" should be entered into the account at their "fair value", except when this cannot be reliably measured. Profits and losses derived from variations in the fair value of biological assets should be recorded in the corresponding year's results. It is possible that this regulation will affect taxation once if it is adopted into Romanian accounting regulations.

Despite the fact that the corporate environmental expenses increase not only in importance but also in monetary units, several enterprises continue to underestimate and enter environmental costs in accounts as general expenses. However, some companies try to connect environmental costs with products or services but the methods of allocation cost used are inappropriate. When no proper allocation method, is used, the manager of an enterprise do not receive reliable information with regard to the real costs and profits in order to maintain or change the products and/or processes. But, green accounting still faces a number of problems, such as, the lack of support of information, specialised personnel as well as the absence of proportional international accounting models.

Environmental issues are still very challenging for Romanian regulators and practitioners, also. As we have mentioned above only a few domestic companies have disclosed environmental items through their annual reports and/or on their own websites. The mentioned practices concerning green accounting in our opinion are asking for certain regulations in order to support the sustainable development of domestic companies and allow certain cost-benefit analysis.

The identification and interpretation of environmental problems and risk will continue to challenge the accounting profession. Accounting standard setters are actively evaluating approaches that may improve the reporting of the problems. However, realistically, we can hope that, in the course of time, general principles may be agreed upon and agreements arrived at with regard to cooperation in financial reporting for external users. An international agreement on general principles may facilitate the efficiency of international cooperation, boosting this effective cooperation. The added value of the paper and the authors' contribution is the presentation and the conciliation of the environmental aspects both from accounting and taxation point of view at the European and national level. This aspect it was not studied yet in national and international literature.

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INTELLECTUAL CAPITAL REPORTING AND DISCLOSURE IN THE ANNUAL REPORTS OF ROMANIAN MANUFACTURING LISTED COMPANIES – THEORETICAL FRAMEWORK

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One of the most researched topic regarding financial reporting and disclosure of today is the way intellectual capital or knowledge assets contributes to the improving of the quality of information disclosed and create or add value to business performance. Also, it is acknowledged that a company has access to a variety of tools for disclosing information on intellectual capital. In our study we have decided to investigate the concept, the measurement models and the intellectual capital disclosure practices using as the source of our documentation books, articles, working papers and online publications. So, in the first part of our research we have presented several points of view in respect to the concept of knowledge assets or intellectual capital and in the second part we have reviewed the literature on the topic highlighting several scholars opinion on reporting and disclosure issues.

Key words: knowledge, intellectual capital, reporting practices, disclosure, annual reports

JEL codes: M41, M10, G14, D83

1. Introduction

In knowledge based economy value is the result of knowledge and information. Moreover, business organizations can not generate profits without ideas, skills talent and intelligence of humans. As Depres and Chauvel (2000) observed beside it's concentration on intangibles, knowledge economy is characterized by networked, digital, virtual and extremely fast moving businesses, better performing, the primary factor of production is knowledge. The three pillars of knowledge economy according to Stewart (2001) are:

- knowledge as the most important factor of production; creating value through knowledge economy is the process of creating value from information;
- knowledge assets; intellectual capital has become the most important knowledge assets embedded in talent, skills, know-how, know-what, relationships and other human values that can be used to create value;
- adaption to knowledge economy in terms of adopting new business language, new management techniques, new corporate governance practices, new technologies and strategies and why not, new accounting.

Studying the literature written on the topic we have found as Tseng and Goo (2005) underlined that there is a common lack of a clear definition that would appropriately describe the concept of intellectual capital. Also, regarding intellectual capital components we have found in the studied literature that intellectual capital is not detached. As Maditinos, Sevic and Tsaidiris (2009) pointed out several scholars grouped intellectual capital in four categories: human capital; structural capital; customer capital and innovation capital (Edvinsson and Malone, 1997; Ross et al., 1997; Stewart, 1997, Sveiby, 1997; Chen et al., 2004, Tseng and Goo, 2005).

Our paper is organized as follows. The next section objective is to underline the differences between classical assets and knowledge based assets focusing on definition and recognition of intellectual capital. The literature review section is concentrated on intellectual capital measurement models and also reporting issues. In the last section we have drawn the conclusions and the limits of our study.

2. From classical assets to knowledge based assets

Companies, regardless of their size, in order to undertake their activity and create value, own both tangible and intangible assets. Buildings, work equipments and instalations, computers are, of course, tangible assets, and the ways in which these generate value for a company and affect performance have been the subject of theoretical and practical speculations in economic literature in past centuries. On the other hand, the considerable growth in the diversity of intangible assets has reoriented, in the last few decades, the focus of researchers from tangible to knowledge based assets. But, what are knowledge based assets? In contrast with tangible assets, these are more difficult to identify, to clasify, to asses and highlight in the structures of financial situations. Yet, in a knowledge based economy, it is imperatively important to understand which activity generates real added value and to adapt contemporary financial reporting to this economic reality. Knowledge based assets or intangible assets have existed for a very long time. As Cohen (2008) so vividly remarked, the first caveman to light a fire knew that he held valuable information. This ability of his represented an intangible asset. Expanding on this reasoning, Cohen underscored the fact that the people who invented the alphabet or the ones who created the calendar or the numeral system were early inventors of extremely important intangible assets. It's a pity they did not know how to patent their inventions or protect their works through copyright (Cohen, 2008:25). It is vital to keep in mind that the terms of knowledge, intangibles and intellectual capital are usually used interchangeably. As Mansour et al. (2008) emphasize the terms of intangibles in accounting literature, knowledge assets by economist and intellectual capital in the management and legal literature are refer essentially to the same thing: a nonphysical claim to future benefits. Unlike the physical or classical assets, the knowledge assets are characterized by increasing return on scale. Return is the outcome of value generated by innovation (discovery), unique organizational designs or human resources practice (Mansour et al., 2008).

An interesting point of view is of Bontis (1998). He emphasized that intellectual capital has been considered by many, defined by some, understood by a select few and formally valued by practically no one. Most of the literature written on intellectual capital, according to Bontis (1998) makes a set of claims that are related to the value and intangible nature of this resource. As Bontis (1998) noticed the concept of intellectual capital was first introduced by Kenneth Galbraith in 1969, who believed that intellectual capital was more than pure intellect but included "intellectual action". It is the move from "having" knowledge and skills to "using" the knowledge and skills that is captured in a numerous way in the literature. The management literature shows two main streams that discuss knowledge assets, in opinion of Marr et al. (2004). One of them, taking an epistemological approach, interprets knowledge as an entity and discusses the differences between information and knowledge and the implications for knowledge management, whereas the other stream of literature discusses knowledge as an organizational asset that has to be managed in order to improve organizational performance. The later stream of research seeks to help managers in managing and evaluating the company performance (Teece, 2000; Roos et al, 1997; Stewart, 1997). In Marr et al. vision a major contribution provided by this research stream is the concept of intellectual capital, which help managers to identify and classify the knowledge components of an organization. The authors also considered that intellectual capital contributed to a better understanding of knowledge assets and was a first step towards a less abstract and more operative conceptualizing of knowledge.

As Abeysekera (2007) noticed several authors have taken a long-term view in defining and analyzing the nature of intellectual capital, though their definitions have varied significantly (Edvinsson and Sullivan, 1996; Brooking, 1997; Edvinsson, 1997; Edvinsson and Malone, 1998; Klein, 1998; Knight, 1999). Because in our paper we are analysing mainly intellectual capital reporting and disclosure, we are interested in the definition of Edvinsson and Sullivan (1996). In their opinion intellectual capital can be defined as knowledge that can be converted into value. Buck et al. (2001) consider that the expression “intellectual capital statement” refers to “capital”, emphasizing the accounting value. While some authors use the concept of intellectual capital while referring to the knowledge of a social community, such as an organization or professional practice groups (Nahapiet and Ghoshal, 1998), other scholars interpret intellectual capital as a human resource (Boudreau and Ramstad, 1997; Liebowitz and Wright, 1999) or associate it with information technology (Davenport and Prusak, 1998). Abeysekera and Guthrie (2002) consider there is considerable ambiguity as to what constitutes intellectual assets, some scholars including all intangibles (Ross et al., 1997; Knight, 1999) but others do not recognize intangibles in the financial statements (Caddy, 2000; Edvinsson and Sullivan, 1996). Abeysekera and Guthrie (2002) also point out the fact that most of the definitions of intellectual capital are based on recognizing knowledge or intellectual assets only. They have ignored the possibility of existence of intellectual liabilities in the concept of intellectual capital (Harvey and Lusch, 1999; Caddy 2000) and external intellectual liabilities (Dzinkowski, 2000). But Abeysekera (2001) suggests that if knowledge is well managed then value is added via intellectual capital and if it is badly managed, this may lead to intellectual liabilities. According to Tseng and Goo (2005) there is a common lack of a clear definition that would appropriately describe the concept of intellectual capital. However, they seem to adopt Stewart’s (1997) definition, also widely, recognized, that intellectual capital has been formalized, captured and enforced so as to generate an advanced value to the organization. Regarding intellectual capital components we have found in the studied literature that intellectual capital is not detached. As Maditinos, Sevic and Tsaidiris (2009) pointed out several scholars grouped intellectual capital in four categories: human capital; structural capital; customer capital and innovation capital (Edvinsson and Malone, 1997; Ross et al., 1997; Stewart, 1997, Sveiby, 1997; Chen et al., 2004, Tseng and Goo, 2005).

3. Literature review on intellectual capital measurement models

As reflected in the various studies conducted by different scholars found in the literature, measuring intellectual capital is not a science as “exact” as mathematics or accounting. According to CEN (2004) (1), there are many interdependencies with other activities and quite often the context in which value is created is not the same as the one in which some of the knowledge efforts take place. And as noted by Iske and Boekhoff (2001) value is not an “intrinsic” property of knowledge: the value of knowledge fully depends on how knowledge is being used. Some knowledge can have a lot of value in one situation but be worthless in another. As we can see in the figure bellow, value can be added in five dimensions:

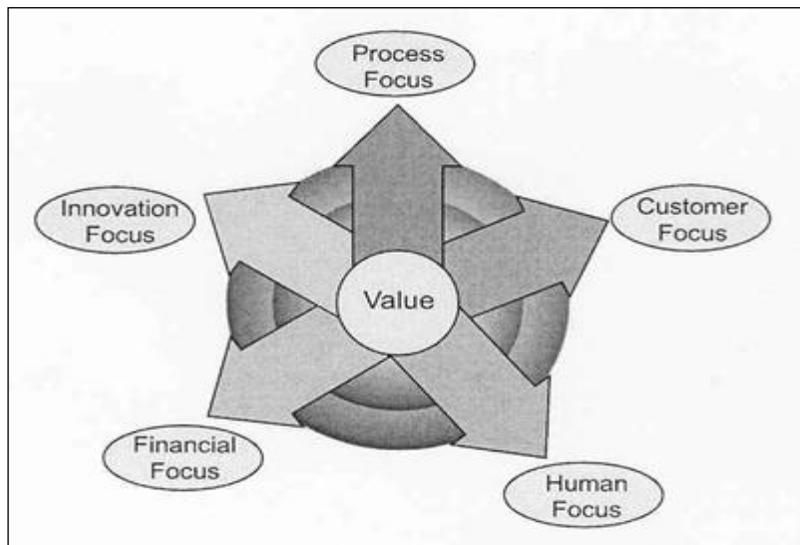


Fig 1.

Source: CEN (2004), European Guide to good Practice in Knowledge Management – Part 4: Guidelines for Measuring Knowledge Management, pg. 7

Many approaches to the measurement of intellectual capital can be identified in the literature. In Sveiby's (2) view the measuring approaches for intangibles fall into at least four categories of measurement approaches.

Direct Intellectual Capital methods (DIC) estimates the value of intangible assets by identifying its various components. Once these components are identified, they can be directly evaluated, either individually or as an aggregated coefficient. **Market Capitalization Methods (MCM)** calculates the difference between a company's market capitalization and its stockholders' equity as the value of its intellectual capital or intangible assets. **Return on Assets methods (ROA)** - average pre-tax earnings of a company for a period of time are divided by the average tangible assets of the company. The result is a company ROA that is then compared with its industry average. The difference is multiplied by the company's average tangible assets to calculate the average annual earnings from the intangibles. Dividing the above-average earnings by the company's average cost of capital or an interest rate, one can derive an estimate of the value of its intangible assets or intellectual capital. **Scorecard Methods (SC)** - the various components of intangible assets or intellectual capital are identified and indicators and indices are generated and reported in scorecards or as graphs. SC methods are similar to DIC methods, expect that no estimate is made of the value of the intangible assets. A composite index may or may not be produced. The figure bellow highlights the four above mentioned well known measurement approaches and shows that one may consider various facets, such as financial valuation, or high levels of evaluation that measure the effect of a knowledge management implementation in terms of macroelements or at a lower level, that is at the organizational component level.

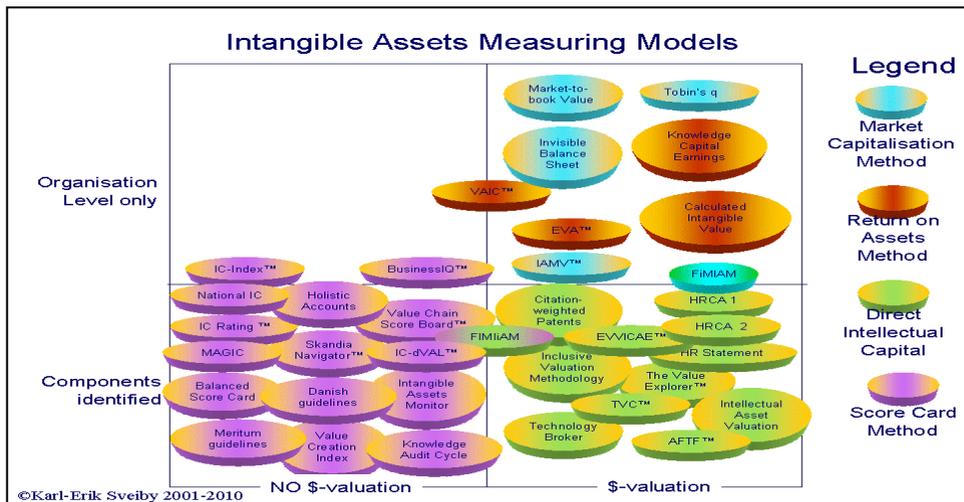


Fig. 2
 Source: Karl-Erik Sveiby, *Methods for Measuring Intangible Assets*, 2001, updated 27.04.2010

As we have found in the studied literature **Skandia** is considered the first large company to have made a truly coherent effort at measuring knowledge assets (Bontis 1996; Huseman & Goodman, 1999). In 1985 Skandia developed the first internally intellectual capital report and became the first company to issue an intellectual capital addendum accompanying its traditional financial report to shareholders in 1994. Leif Edvinsson, the chief architect behind Skandia’s initiatives, developed a dynamic and holistic intellectual capital reporting model called the Navigator with five areas of focus: financial, customer, process, renewal and development and human capital (Bontis, 2001). According to Edvinsson and Malone (1997) the new accounting taxonomy sought to identify the roots of a company’s value by measuring hidden dynamic factors that underlie the visible company of buildings and products. As Bontis (2001) noticed Skandia’s value scheme contains both financial and non-financial building blocks that combine to estimate the company’s market value. This conceptualization achieved a balance for Skandia in trying to represent both financial and non-financial reporting, uncovering and visualizing its intellectual capital, tying its strategic vision to the company’s core competencies reflecting knowledge sharing technology and knowledge assets beyond intellectual property and reflecting its market value better.

The **Intangible Assets Monitor** (Sveiby, 1997) is a method for measuring intellectual capital and a presentation format that displays a number of relevant indicators for measuring intellectual capital in a simple fashion. The choice of indicators depends on the organizational strategy. On the surface, the Intangible Assets Monitor looks similar to the Kaplan Norton Balanced Score Card, however there are significant differences. The Intangible Assets Monitor can be integrated into management information systems and it should be accompanied by a number of comments. Only a few of the suggested indicators should be selected and designed the main purpose to achieve is to get a broad picture. So, essentially management selects indicators, based on the strategic objectives of the firm, to measure four aspects of creating value from three classes of intellectual capital labeled: people’s competence, internal structure, external structure and value creation ways are: growth, renewal, utilization/efficiency and risk reduction/stability.

Intellectual Capital-Index is an example of “second generation” practices that attempt to consolidate all the different individual indicators into a single index, and to correlate the changes in intellectual capital with changes in the market (Roos et al., 1997). The concept of an IC-Index was first advanced by Goran Roos and his colleagues at Intellectual Capital Services Ltd., and was first used by Skandia in its IC supplement to the annual report. According to Roos et al.

(1997) the IC-Index has several distinct features: it is an idiosyncratic measure; it focuses on the monitoring of the dynamics of IC; it is capable of taken into account performance from prior periods; it shed light on a company different from an external view typically based on an examination of physical assets; it is a self-correcting index meaning that if performance of the IC-index does not reflect changes of the market value of the company, then the choice of capital forms, weights and/or indicators is flawed. Like most other measures of tangible assets, an IC-index does depend on value judgements, in the choice of weights, indicators and even the assumption that intellectual capital is present and important in company operations. Also, Roos et al. (1997) argue that intellectual capital measurement and especially a consolidated measure such as the IC-index makes a larger part of the organization visible and open to valuation.

According to Bontis et al. (1999), **Economic Value Added (EVA)** was introduced by Stern Stewart as a comprehensive performance measure that uses the variables of capital budgeting, financial planning, goal setting, performance measurement, shareholder communication and incentive compensation to account properly for all ways in which corporate value can be added or lost. While several scholars consider that economic value added is the net result of all managerial activities, Bontis et al (1999) described EVA as providing a common language and benchmark for managers to discuss value creation and also can increase the legitimacy of a company in the eyes of financial markets. EVA is intended to offer improvements to market value added calculation. Similar to EVA, MVA method derives from the Alfred Marshall concept of „economic profit“. MVA is the difference between actual market value of the company (invested capital) and the present value of invested capital. In other words MVA is the difference between cash out or what investors could get by selling at the present conditions of firm and market and cash in or what investors contributed over the years from the beginning of the firm.

Tobin's Q ratio named Q ratio or q, is the market value of invested capital relative to assets replacement cost (Tobin, 1969). The Q is the ratio of the stock market value of the firm divided by the replacement cost of its assets and changes in Q provide a proxy for measuring effective performance or not of a firm's intellectual capital. Tobin developed the Q ratio as a measure to help predict investment decision independent on macroeconomic factors such as interest rate. In Stewart's (1997) opinion Tobin's Q ratio was not developed as a measure of intellectual capital, but former Federal Reserve chairman Alan Greenspan has noted that high Q and market to book ratios reflect the value of investments in technology and human capital. Norton and Kaplan's **Balance Score Card** was created to help managers to transform organization's strategy into a reliable set of performances that will provide framework for a strategic measurement and management system (Anghel, 2008). A company's performance is measured by indicators covering four major focus perspectives: financial perspective, customer perspective, internal process perspective and learning perspective (Kaplan and Norton, 1996). Balance Score Card indicators are based on the strategic objectives of the firm. This measurement model of intangible assets was developed considering the ability of a company to exploit and develop its intangible assets. The **Value Added Intellectual Coefficient™ (VAIC™)** methodology, developed by Ante Pulic (1998), is an analytical procedure designed to enable management, shareholders and other relevant stakeholders to effectively monitor and evaluate the efficiency of VA by a firm's total resources and each major resource component. Pulic (1998) states the higher the VAIC™ coefficient, the better the efficiency of VA by a firm's total resources. Formally, VAIC™ is a composite sum of three indicators: (1) Value Added Capital Coefficient (VACA) – indicator of VA efficiency of capital employed; Value Added Human Capital (VAHU) – indicator of VA efficiency of human capital; and (3) Structural Capital Value Added (STVA) – indicator of VA efficiency of structural capital.

Baruch Lev's model (1999), knowledge capital earnings, reveals a way to measure assets, intellectual earnings and knowledge earnings. As Lev's describe his model in an interview taken

by Alan Webber in 1999 (3), „it’s a computation that starts with what I call normalized earnings – a measure that’s based on past and future earnings...My approach looks at the past. Based on those forecast, I create an average and I call that average normalized earnings. From those normalized earnings, I then subtract an average return on physical and financial assets, based on the theory that these are substitutable assets...when I subtract from the total normalised earnings a reasonable return on the physical and financial assets I define what remains as the *knowledge earnings*”. Further on in the same interview Baruch Lev mention that technological capabilities index is based on measures of inputs, such as investment in R&D, investment in product development, investment in information systems; on measures of intermediate outputs, such as patents and trademarks; on measures of competitive position such as the number of people who access a particular web site and on measures based on the ultimate output – commercialization.

These were some of the models that over the past years were developed to measure intellectual capital or in general intangible or knowledge assets.

4. Literature review on intellectual capital reporting practices

Several scholars have concentrated their efforts toward understanding and analyzing intellectual capital reporting practices. For instance, Abeysekera and Guthrie (2006) identify the following categories of intellectual capital reporting: ratios and values; reporting intellectual capital via intellectual capital statements; theoretical models. Concerning reporting intellectual capital as ratios and values Roos et al. (1997) states that intellectual capital is by definition intangibles and therefore the only possible way to measure them is by proxy variables or indicators. Authors like Abeysekera and Guthrie (2006) considered that these techniques could be classified into two broader sub-categories: the firm macro level for inter-firm comparisons; and of measuring and reporting within firm level (micro) for interdivisional comparisons. In regard to reporting intellectual capital through intellectual capital statements, empirical models have been proposed to measure intellectual capital items (Leibowitz & Wright, 1999; Decker & Hoog, 2000). Some models used activity based costing to determinate cost and market value to determine revenue. In Abeysekera’s vision (2001) another conceptual approach is to report intellectual capital in relation to the “fair value” of the firm and to recognize intellectual revenue or intellectual expense as the difference of fair value between two periods within the traditional accounting system. Also, Abeysekera and Guthrie (2006) identified five major frameworks of intellectual capital reporting: structures holding intellectual assets, developed by Sveiby (1997), focused on intellectual assets; capital holding intellectual items, that analysis intellectual capital in relation to intellectual assets (Edvinsson, 1997; Edvinsson and Malone, 1998; Roos et al., 1997); assets representing intellectual capital, that focused on intellectual assets and was in Brooking (1999) interest; strategic and measurement root focused on the role of intellectual capital, that was in attention of Roos et al. (1997) research and a combination of assets and capital representing intellectual capital, developed by IFAC in 1998 and Dzikowski (2000).

As Abeysekera (2001) noted annual reports are an ideal research location for applying the intellectual capital framework because they provide a good proxy with which to measure the comparative positions and trends of intellectual capital between firms, industries and countries. Several papers and studies that we have found in the literature concerning intellectual capital issues has used annual reports as source documents to discover the status of intellectual capital of companies (Abeysekera and Guthrie, 2005; Brennan, 2001; Guthrie and Petty, 2000; Vergauwen and van Alem, 2005). The value-creation capabilities of different organizations and entities are studied in the last decade by several authors like Edvinsson (2002), Bontis (2004), Tallman et al. (2004), Bonfour and Edvinsson (2005), Schiuma et al. (2005). Also, several theoretical contributions have underlined the strategic importance of intangible resources for the value

creation capabilities, some of them tried to build approaches and tools more oriented towards project and management processes or analyzed the relationship between knowledge resources, value creation capabilities and competitiveness (Bontis, 2004; Bonfour and Edvinsson, 2005; Pulic, 2005). Lev and Sougiannis (1996) valued and calculated intangibles and then correlated those values with financial measures while Edvinsson (1997) identified the so called “hidden values” of a company and developed an intellectual capital management model. Also, various prior studies have suggested that the level of intellectual capital disclosure in annual reports is relatively low.

5. Conclusions and limits of the research

As it can be understood from the above presented issues concerning the intellectual capital concept, measurement models and reporting practices we did not find in the studied literature on the topic much homogeneity and uniform views. Also, our work was a difficult one taking into account the very rich and diverse literature. However, we consider that we have synthesized the main or important aspects regarding the definition, the measurement and reporting of knowledge assets. But, there are a few aspects that were not discussed and this is surely one of the limits of our study. Another limit refers to the fact that we have not pointed out separately the contributions of domestic authors interested in this subject.

Note

(1) European Committee for Standardization (Comite Europeen de normalization), European Guide to good Practice in Knowledge Management – Part 4: Guidelines for Measuring Knowledge Management

(2) <http://www.sveiby.com/articles/IntangibleMethods.htm/updated> 07 April 2010

(3) <http://www.fastcompany.com/magazine/31/lev.html?page=0%2C3/download> on 10.01.2011

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INTELLECTUAL CAPITAL REPORTING AND DISCLOSURE IN THE ANNUAL REPORTS OF ROMANIAN MANUFACTURING LISTED COMPANIES – METHODOLOGY AND DISCUSSION OF RESULTS

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In our study we have proposed to measure the extent of intellectual capital disclosure using annual reports as the source of our documentation. The empirical analysis is twofold: firstly we are interested in analyzing the value of intellectual capital using a value-based approach, through the evolution of market to book value ratio over the selected period and secondly we carry out a content-based analysis of the complete annual reports of the selected companies over the five year period and calculate an intellectual capital disclosure index. Looking at the figures we can conclude that only 50% of Romanian manufacturing companies hold intellectual capital assets for the period analysed and also they are mostly disclose information that refers to relational capital. The intellectual capital voluntary disclosure index for the 2005-2009 years for the sampled companies is on average almost 19%, considered very low.

Key words: knowledge, intellectual capital reporting, annual reports, listed companies, disclosure

JEL codes: M41, M10, G14, D83

1. Introduction

This study main objective is to highlight several aspects in regard to intellectual capital components reported voluntarily by Romanian manufacturing listed companies in their annual reports and to investigate, by following the evolution of market to book value ratio, the tendency of the companies surveyed to create value through their knowledge assets. Motivation in selecting this topic of research lies in our interest in financial reporting of today, especially in voluntary disclosure practices of domestic listed companies. In our approach that mainly focused on analyzing the annual reports of selected listed companies we have proposed two sections of the research and three research questions.

Voluntary reporting activities of several important European firms have generated in the last decades a rethinking of the traditional financial accounting practice and disclosure. Taking into account the results of different studies found in the literature and the trends in financial reporting of today, we consider that our study contributes to understanding intellectual capital reporting practice of Romanian listed companies, revealing the fact that despite the very low disclosure index of knowledge assets it can be recognized an increasing interest of these entities in the last three years in disclosing information regarding this kind of hidden values. As Petty et al. (2009) suggests the greatest obstacles for firms wishing to adopt intellectual capital reporting are: the lack of consistency in methodologies for disclosure and the difficulties in assigning meaningful and reliable quantitative values to components of knowledge assets. We agree with the above mentioned authors which considered that while these obstacles persist, it is likely that few

companies will see any benefits accruing to them as a reward for their efforts in extending voluntary disclosures of hidden values.

In the next sections of our work we have presented the research methodology and design, the questions we have formulated, the discussion and analysis of the obtained results and finally we mentioned the conclusions of our investigative study and the limitations of the research.

2. Methodology and research design

Our paper analysis the evolution of market to book value ratio for the sampled companies in the period 2005-2009 and the voluntary disclosure of intellectual capital in the same period. First we have to mention that we have selected our sample companies looking for such industries that are consistent in intellectual capital and actually we have searched for information regarding intangible assets disclosed in the annual reports. Our study has two major objectives. First to investigate the evolution of market to book value ratio and secondly to analyze what information about intellectual capital are voluntarily disclosed through annual reports by sample Romanian listed companies.

In the present paper we have used content analysis for investigating annual reports of the nineteen companies listed on Bucharest Stock Exchange (BSE), first, second and third tier, selected after we have established the main criteria for sampling. We have chosen our sampling criteria starting from the hypothesis already tested in previous research that companies' size is an important predictor of corporate disclosure behaviour (Buzby, 1975; Raffournier, 1995; Graven and Marston, 1999; Stolowy and Ding, 2003) and large companies traded on a capital market should have the most complete annual reports and a larger range of voluntary information disclosed. Out of the total listed companies on BSE we selected those who do business in the manufacturing industry relying on the assumption that companies that activate in IT and manufacturing industry are more likely to disclose information about intellectual capital and corporate value. We have found forty-four companies in the manufacturing industry listed on the first, second and third category, out of which we have selected our sample according to the following criteria: market capitalization, own web-site, annual reports and audit reports. Thus, our sample consists of nineteen companies from manufacturing industry, most of them doing business in the chemical industry. Companies in the sample were selected on the bases of their knowledge-based assets and incentives to report on intellectual capital. For measuring the intellectual capital index we have analysed the content of annual reports of sample companies. The empirical analysis is twofold: firstly we are interested in analyzing the value of intellectual capital using a value-based approach, through the evolution of market to book value ratio over the selected period and secondly we carry out a content-based analysis of the complete annual reports of the companies over the five year period and calculate an intellectual capital disclosure index inspired by the model of Li, Pike and Haniffa (2007). Annual reports are the main annual source of communication between the company and its external investors through these means the company publishes investment related information. The annual reports examined in this paper are based on the 2005, 2006, 2007, 2008 and 2009 fiscal years.

Companies were surveyed between July 2010 and March 2011 to find out whether they have voluntarily disclosed information about intellectual capital or knowledge assets. Data was gathered from the following sources: www.bvb.ro, www.cnvm.ro, www.ktd.ro, and www.kmarket.ro, sites providing stock exchange information and own web-sites of companies listed on first and second and third tiers at BSE; we have collected the data for determining the market capitalization of the companies listed on BSE and also a part of the accounting and financial information regarding the financial statements and annual reports for the years 2005, 2006, 2007, 2008 and 2009; the accounting and financial information obtained from the site of the Romanian Ministry of Economy and Finance.

*The sampled companies**Table no. 1*

No	Symbol name on BSE	Company	No	Symbol name on BSE	Company
1	AMO	AMONIL SA	11	TRP	TERAPLAST SA
2	AZO	AZOMUREŞ SA	12	PREH	PREFAB SA
3	OLT	OLTCHIM SA	13	CBC	CARBOCHIM SA
4	STZ	SINTEZA SA	14	CEON	CEMACON SA
5	ATB	ANTIBIOTICE SA	15	CMCM	COMCM SA
6	BIO	BIOFARM SA	16	ALR	ALRO SA
7	SCD	ZENTIVA SA	17	COS	MECHEL TÂRGOVIŞTE SA
8	MJM	MJ MAILLIS SA	18	ART	TMK-ARTROM SA
9	PPL	PRODPLAST SA	19	ZIM	ZIMTUB SA
10	ROCE	ROMCARBON SA			

Our research is a quantitative study organized in two main sections. In the first section we tried to identify which firms in the sample shows a market to book value ratio near or greater than 1 assuming that those companies have greater intellectual capital compared to other sampled companies. On the second level of our investigative study we have constructed an intellectual capital disclosure index based on a content analysis of annual reports and the research methodology found in Li, Pike and Haniffa (2007). The research instrument adopted by the mentioned authors grouped the intellectual capital items into three categories: human capital items, relational intellectual capital items and structural intellectual capital items. Our approach in scoring the items can be found in the research methodology of Li, Pike and Haniffa (2007) and essentially consists in assigning the score 1 if the information is disclosed in the annual report or the score 0 if the information is not disclosed. The scores for each item were then added and equally weighted to derive a final score for each company. The intellectual capital disclosure index (ICD) for each company is calculated as follows:

$$ICD_j = \frac{\sum_{i=1}^{n_j} X_{ij}}{n_j} * 100$$

Where n_j = number of items (61) for j company (19), found in the annual reports of each company, for the period between 2005 and 2009 fiscal years;

X_{ij} = 1 if the i item is disclosed

0 if the i item is not disclosed

The table bellow presents the items scored for each year disclosed in the annual reports of the sampled companies.

Information categories regarding intellectual capital disclosure
Table no. 2

		2005	2006	2007	2008	2009
No	ITEMS - HIC					
1	Number of employees	94,74%	100,00%	100,00%	100,00%	100,00%
2	Employee age	0,00%	0,00%	0,00%	0,00%	5,26%
3	Employee diversity	52,63%	57,89%	52,63%	63,16%	73,68%
4	Employee equality	0,00%	0,00%	0,00%	0,00%	5,26%
5	Employee relationship	0,00%	5,26%	5,26%	10,53%	5,26%
6	Employee education	42,11%	52,63%	52,63%	57,89%	52,63%
7	Skills/Know-how/Expertise/Knowledge	0,00%	0,00%	0,00%	0,00%	0,00%
8	Employee work related competences	5,26%	10,53%	5,26%	15,79%	5,26%
9	Employee work-related knowledge	0,00%	10,53%	5,26%	15,79%	5,26%
10	Employee Attitudes/Behaviour	5,26%	0,00%	0,00%	0,00%	0,00%
11	Employee Commitments	0,00%	0,00%	0,00%	0,00%	0,00%
12	Employee motivation	5,26%	5,26%	5,26%	5,26%	5,26%
13	Employee productivity	21,05%	15,79%	21,05%	21,05%	21,05%
14	Employee Training	10,53%	10,53%	21,05%	21,05%	10,53%
15	Vocational qualifications	5,26%	5,26%	5,26%	5,26%	10,53%
16	Employee development	0,00%	5,26%	10,53%	5,26%	5,26%
17	Employee flexibility	0,00%	0,00%	0,00%	0,00%	0,00%
18	Entrepreneurial spirit	0,00%	0,00%	5,26%	0,00%	0,00%
19	Employee Capabilities	5,26%	5,26%	10,53%	5,26%	0,00%
20	Employee teamwork	0,00%	0,00%	0,00%	0,00%	0,00%
21	Employee involvement with community	10,53%	15,79%	15,79%	15,79%	10,53%
22	Other employee Features	63,16%	63,16%	73,68%	68,42%	78,95%
	Average	14,59%	16,51%	17,70%	18,66%	17,94%
No	ITEMS - RIC					
1	Customers	26,32%	21,05%	26,32%	21,05%	21,05%
2	Market presence	52,63%	68,42%	63,16%	63,16%	63,16%
3	Customer relationships	0,00%	0,00%	0,00%	0,00%	10,53%
4	Customer acquisition	0,00%	5,26%	5,26%	10,53%	5,26%
5	Customer retention	0,00%	0,00%	10,53%	10,53%	5,26%
6	Customer training&education	0,00%	0,00%	0,00%	0,00%	0,00%
7	Customer involvement	5,26%	5,26%	5,26%	5,26%	5,26%
8	Company Image/reputation	10,53%	15,79%	10,53%	15,79%	10,53%
9	Company awards	5,26%	5,26%	5,26%	5,26%	10,53%
10	Public relation	0,00%	0,00%	5,26%	0,00%	10,53%
11	Diffusion&networking	31,58%	31,58%	31,58%	36,84%	26,32%
12	Brands	63,16%	63,16%	63,16%	57,89%	57,89%
13	Distribution channels	47,37%	57,89%	68,42%	68,42%	68,42%

14	Relationship with suppliers	63,16%	68,42%	68,42%	63,16%	68,42%
15	Business collaboration	15,79%	21,05%	21,05%	26,32%	15,79%
16	Business agreements	5,26%	0,00%	0,00%	0,00%	5,26%
17	Favourite contract	5,26%	5,26%	5,26%	5,26%	10,53%
18	Research collaboration	10,53%	15,79%	26,32%	31,58%	31,58%
19	Marketing	10,53%	10,53%	15,79%	15,79%	21,05%
20	Relationship with stakeholders	42,11%	52,63%	57,89%	36,84%	47,37%
21	Market leadership	5,26%	5,26%	5,26%	10,53%	10,53%
	Average	19,05%	21,55%	23,56%	23,06%	24,06%
No	ITEMS - SIC					
1	Intellectual property	63,16%	68,42%	68,42%	68,42%	68,42%
2	Process	0,00%	0,00%	0,00%	0,00%	0,00%
3	Management philosophy	15,79%	21,05%	21,05%	26,32%	21,05%
4	Corporate culture	5,26%	5,26%	5,26%	5,26%	0,00%
5	Organization Flexibility	0,00%	0,00%	0,00%	0,00%	0,00%
6	Organization structure	5,26%	5,26%	5,26%	5,26%	5,26%
7	Organization learning	0,00%	0,00%	0,00%	0,00%	0,00%
8	Research & Development	47,37%	57,89%	57,89%	68,42%	68,42%
9	Innovation	15,79%	10,53%	5,26%	5,26%	5,26%
10	Technology	63,16%	63,16%	52,63%	63,16%	68,42%
11	Financial Relations	10,53%	15,79%	15,79%	15,79%	15,79%
12	Customer support function	0,00%	0,00%	0,00%	0,00%	0,00%
13	Knowledge-based infrastructure	0,00%	0,00%	0,00%	0,00%	0,00%
14	Quality management & improvement	0,00%	0,00%	0,00%	0,00%	5,26%
15	Accreditations (certificate)	31,58%	26,32%	42,11%	36,84%	42,11%
16	Overall infrastructure/capability	15,79%	15,79%	15,79%	15,79%	10,53%
17	Networking	0,00%	0,00%	0,00%	0,00%	0,00%
18	Distribution Network	5,26%	5,26%	5,26%	5,26%	5,26%
	Average	15,50%	16,37%	16,37%	17,54%	17,54%

Source: adapted from Li, Pike and Haniffa (2007)

3. Research questions

As it is well known the most popular indicator to measure knowledge assets at organizational level is the comparison between the market price and the book value. It had been shown that if the market value is higher than the book value then the company hold intellectual assets not presented in the financial statements but if the book value is higher than the market value the company has intellectual liabilities. Although, these measures had been severely criticized for its simplicity, it remains useful to illustrate the value of the company which is not reflected in the accounts (Oliveras and Kasperskaya, 2004). So, starting from this simple fact we have formulated our first research question: *Romanian manufacturing companies hold “hidden values” not reported in the financial statements?*

Also, because we were interested in analysing what information is disclosed about intellectual capital in the annual reports of the sampled companies, our second and third research questions are considering this issue of voluntary disclosure of intellectual capital. After the delimitation of the research instrument and scoring the items disclosed in the annual reports we tried to seek answer to the following questions: *what information regarding intellectual capital are voluntary disclosed by the Romanian manufacturing companies through annual reports?* and *which is the general score of intellectual capital disclosure for these companies?*

4. Discussion of results

As we have mentioned above our work is divided in two main sections. Therefore, we would present and discuss the obtained results and trying to answer the research questions. As regard to the first section of our research we have calculated the market to book value ratio for each sampled company, for the period from 2005 to 2009 and then compared the obtained results to discover those companies which are hold hidden values, meaning intellectual capital or knowledge assets but they do not report this in the financial statements.

In the table bellow can be seen the values of the indicator for each selected company.

	2005	2006	2007	2008	2009	Average
AMO	94,06%	127,49%	93,63%	73,51%	22,46%	82,23%
AZO	60,00%	39,00%	30,00%	51,00%	33,00%	42,60%
OLT	340,00%	422,00%	100,00%	-82,00%	-18,00%	112,40%
STZ	11,08%	17,56%	2,48%	2,19%	1,10%	6,88%
ATB	216,78%	351,76%	327,44%	287,38%	103,88%	257,45%
BIO	62,20%	90,86%	204,04%	218,97%	127,98%	140,81%
SCD	175,18%	263,20%	256,05%	87,22%	81,90%	172,71%
MJM	196,05%	178,66%	229,46%	244,56%	250,00%	219,75%
PPL	1,58%	20,44%	50,14%	38,96%	35,84%	29,39%
ROCE	53,74%	76,45%	163,27%	106,22%	61,89%	92,31%
TRP	8,43%	6,88%	34,08%	123,51%	81,31%	50,84%
PREH	63,08%	318,04%	459,34%	95,67%	33,91%	194,01%
CBC	58,60%	46,64%	102,39%	90,91%	22,18%	64,14%
CEON	0,07%	0,03%	0,17%	82,01%	29,25%	22,31%
CMCM	0,20%	0,01%	0,32%	24,95%	23,00%	9,70%
ALR	214,66%	174,13%	395,96%	262,67%	90,97%	227,68%
COS	36,57%	57,33%	233,85%	122,43%	56,18%	101,27%
ART	6,81%	13,12%	62,16%	36,99%	62,15%	36,25%

	2005	2006	2007	2008	2009	Average
ZIM	32,63%	31,17%	58,97%	60,04%	24,84%	41,53%
Average	85,88%	117,62%	137,04%	101,43%	59,15%	100,22%
Standard deviation	0,937314	1,279155	1,451932	0,914754	0,573473	0,77486

Source: authors working

Comparing the results we can see that out of the nineteen selected companies only nine reveal the average of market to book value ratio between 80% and 300%. We are presenting the developments of market to book value ratio in the selected period only for those nine companies.

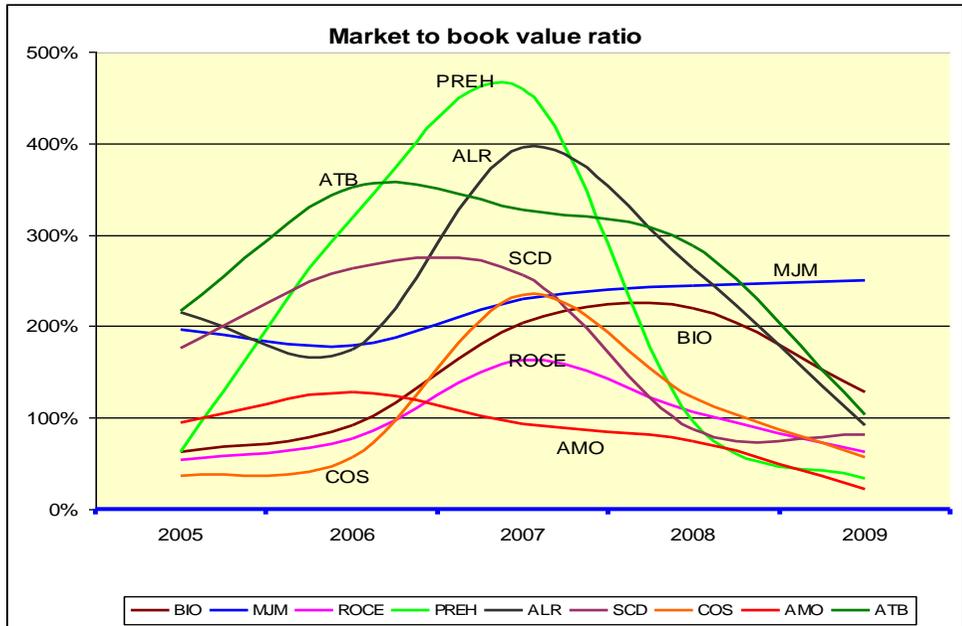


Chart 1 - Market to book ratio for nine companies, on average > 100%

Source: authors working

Looking at the figures we can conclude that only 50% of Romanian manufacturing companies hold intellectual capital assets for the period analysed and also as shown in the chart above for the nine companies that are in “good position” regarding the studied indicator the financial and economic crisis significantly affected the evolution of the “hidden values”. In respect to the intellectual capital disclosure through annual reports we have found that Romanian manufacturing companies mostly disclose information that refers to relational capital gathering aspects mainly about market presence, brands, suppliers and distribution channels.

Table no. 4 presents the descriptive statistics for the extent of human, relational and structural capital information disclosed in the companies’ annual reports. The broadened information disclosed targets the relational capital aspects of the firms.

Statistics of the intellectual capital information disclosed in annual reports **Table no. 4**

	Year	2005	2006	2007	2008	2009	Average
	ICD-Annual average	16,38%	18,15%	19,21%	19,75%	19,85%	18,67%
HIC	HIC average	14,59%	16,51%	17,70%	18,66%	17,94%	17,08%
	Median	5,26%	5,26%	5,26%	5,26%	5,26%	5,26%
	Std. deviation	25,47%	26,80%	27,25%	27,79%	29,54%	27,21%
	Minimum	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
	Maximum	94,74%	100,00%	100,00%	100,00%	100,00%	98,95%
RIC	RIC average	19,05%	21,55%	23,56%	23,06%	24,06%	22,26%
	Median	10,53%	10,53%	10,53%	15,79%	10,53%	12,63%
	Std. deviation	21,33%	24,25%	24,40%	22,48%	22,25%	22,64%
	Minimum	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
	Maximum	63,16%	68,42%	68,42%	68,42%	68,42%	66,32%
SIC	SIC average	15,50%	16,37%	16,37%	17,54%	17,54%	16,67%
	Median	5,26%	5,26%	5,26%	5,26%	5,26%	5,26%
	Std. deviation	20,87%	22,39%	22,11%	24,12%	24,93%	22,73%
	Minimum	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
	Maximum	63,16%	68,42%	68,42%	68,42%	68,42%	67,37%

Source: authors working

The descriptive statistic for intellectual capital disclosure index is presented in *table no. 5*

Intellectual capital disclosure (ICD) statistics **Table no. 5**

Year	2005	2006	2007	2008	2009	Average
Score ICD (%)	16,39%	18,21%	19,33%	19,84%	19,93%	18,74%
ICD Standard deviation	9,87%	8,69%	9,46%	8,53%	8,49%	8,32%
ICD Minimum Score	0,00%	6,56%	4,92%	6,56%	8,20%	6,56%
ICD Maximum Score	40,98%	42,62%	44,26%	40,98%	47,54%	43,28%

Source: authors working

As can be easily seen in the chart below the ICD index in average is between 20 and 45% for only six companies from the sample.

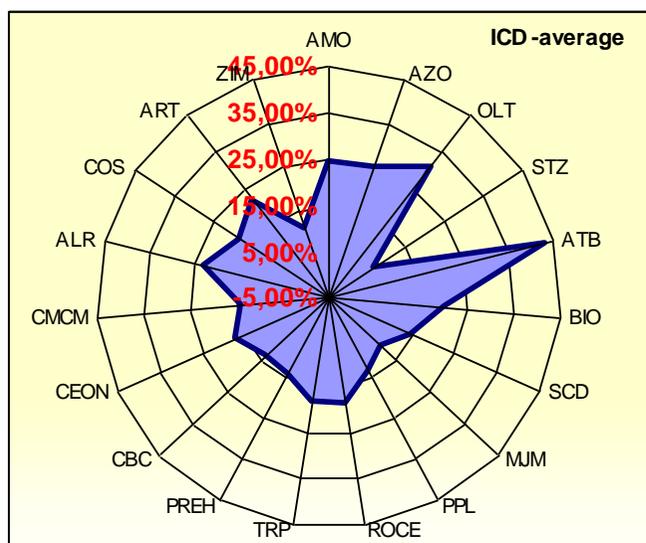


Chart 2 - Companies' ICD index related to ICD average
 Source: authors working

The preliminary findings of the content based analysis of the complete annual reports of the selected Romanian manufacturing companies over the five year period seem to suggest that although the level of disclosure has in average increased over time, this is mainly in a descriptive or narrative way. Also, as it can be observed from the table no. 5 the level of intellectual capital disclosure remains still low. However, it is worth mentioning that ICD in 2009 almost covers the voluntary disclosure index of all previous years. Arguments for this fact lies in general trend of growth of ICD for all selected companies because of the improved communication related to non-financial intellectual capital information. The chart bellow captures this trend of ICD for the sampled companies.

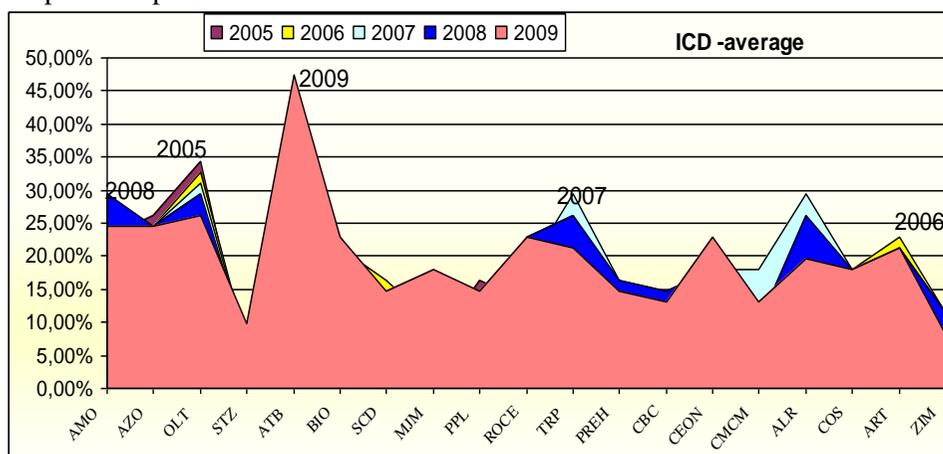


Chart 3 – ICD index evolution for selected companies
 Source: authors working

5. Conclusions, practical implications and research limitations

This paper seeks to identify if Romanian manufacturing companies are interested in reporting intellectual capital information and focuses on analyzing which aspects concerning intellectual capital are voluntarily reported by these firms in annual reports. In order to capture the ways in

which knowledge assets or hidden values are reported by these firms we performed a review on the measurement models of intellectual capital found in the literature. Then we analyzed the value of intellectual capital using market to book value ratio evolution over the considered period for the sampled companies. Our results showed an interesting trend, meaning after an increase by 2007 was recorded a general decrease in the "hidden value" of selected companies, probably due to the financial crisis and general trends in stock market. Regarding the practical implications of our approach in respect to measure the intellectual capital over the five considered years, financial analysts and other experts in our opinion will be able to understand better the way firms create added value and how this value can be related to business performance and a modern financial reporting.

This study also focuses on the analysis of annual reports from 19 listed Romanian manufacturing companies over a five year period, from 2005 to 2009. Our goal was to construct an intellectual capital disclosure index based on the content-analysis of the annual reports. We found that in average the voluntary intellectual capital disclosure index had increased for the selected companies from year to year, what we believe that is a positive signal to stakeholders. However, the level of disclosure of hidden values remains still low. This behavior towards low voluntary disclosure can be explained in our vision by the fact that Romanian market is an emerging small market in which capital market fund raising is not regarded to be important source of financing and there is poor enthusiasm from companies for modern, transparent reporting and permanently seeking to satisfy the various information needs of different users. As a major conclusion of our research emerges the fact that Romanian manufacturing companies show low interest for reporting intellectual capital with few exceptions.

Our paper based provides insights to the components of intellectual capital voluntarily disclosed through annual reports and the conducted analysis of the items disclosed is cross-sectional. As a limit of our research we consider is the small sample size but it is unavoidable because the small Romanian capital market. Another limit that can be overcome in future studies is concerning the factors that influence the level of voluntary disclosure of intellectual capital information in annual reports of Romanian manufacturing listed companies. We are motivated to continue this research by the recent recommendations of international regulators and researchers that are encouraging companies to improve their business reporting by making extensive voluntary disclosures of information about knowledge assets.

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THE PROFIT TARGET IN A RESTAURATION UNIT

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The hospitality industry represents one of the most dynamic sectors of the contemporary society, with an emphasised role in the process of globalization. Currently, the hospitality industry does not only face the challenges of the economic crisis but the changes in the market, the consumers' behaviour and the technological trends, too. That is why, in this time, it is extremely important to apply the management accounting and the cost calculation in any entity in the hospitality industry in order to cope with the market challenges.

The main services are performed through the hospitality industry: the accommodation and the restauration. These services satisfy the vital needs of the tourists, but this industry must meet other needs or requests such as the acknowledgement of the social status, the desire to know other cultures or traditions, to spend free time in a pleasant manner etc.

Our intention and goal in the current article is to approach an image of the CVP analysis in the decision making process with an emphasis on the restauration in the hospitality industry. In order to cope with this critical time, the competition and to achieve the profits estimated, the managers in the hospitality industry can apply the CVP analysis, one of the simplest and most useful analytical instruments.

The paper will tackle with the problem of the break even point in a restaurant, one of the main indicators of the CVP model and also the possibility of the decision making process orientation.

Keywords: Prag de rentabilitate, Industria ospitalității, Restaurant, Profit țintit

JEL Codes: M41

Introduction

Tourism represents an economic-social phenomenon characteristic to the modern civilization, well grounded in the life of the society and, therefore, strongly influenced by its evolution. Addressing large social segments and meeting their needs, tourism is by far the sector characterised by an accentuated dynamism, both nationally and internationally. Tourism involves a vast human and material potential due to its complex content and its mass character which has important implications on the evolution of the national economies and that of the society.

The tourism is a strategic economic activity in Romania, its importance in the national economy being likely to increase in the next years. Tourism contains a large variety of products and destinations and it involves many interested parties both from the public sector and from the private sector and has as main activity subfields the accommodation and the restauration. The tourism has a great potential regarding the contribution to the achievement of Romania's several major objectives such as the sustainability, the economic growth, the employment and the economic-social cohesion as well.

The term of public food service is more and more replaced, lately with the simple one of nourishment and as the most representative type of entity is the restaurant, especially for denoting the activities performed in superior categories entities, the last years and a series of authors imposed the term "restoration" with its variant "restoration".

Public food service/nourishment/restauration contains the entire production and distribution of foods and drinks, respectively, and, according to case, the preparation of culinary dishes and pastry-confectionary products, the goods supply, the consumerism of products inside or outside the entities and the creation of an environment favourable to the clients' relaxation and entertainment (Radu Nicolescu,1999: 12).

The modern life, the specialization of the individuals and the rise in the profits of a certain part of the population in the urban areas as well as the more stringent time crisis make that, nowadays, in the world each third meal is served outside the household”(Nicolae Lupu 1998: 40). It is obvious that apart from the latter's touristic or collateral motivations, the restauration is motivated by other *four functions of consumerism in public food entities*, and respectively by: *nourishment, loisir, conviviality, businesses*.

Starting from the importance of the hospitality industry, from the perspectives of this sector's evolution but also taking into account the current conjuncture of the national economies seriously hit by the world economic crisis, the maintenance and development of the activity of an entity in tourism, the restauration industry implies the harmonization of the market opportunities with own resources and abilities, the capitalization of strategies based on information regarding the costs of the touristic products and of the complementary services, based on the financial-accounting information. The lack of a coherent management strategy implies an inherent weakness for the cost management system. Becoming aware of the benefits provided by the supply of quality services connected to a fair level of prices does not represent a common practice in the present. (Larisa Dragolea, Radu Matei Todoran, 2009)

At the level of touristic sector, generally, but also in what the restaurants are concerned, the key factors of success are:

- the differentiation of own touristic products compared to those of the competition through a plus of attractiveness provided both by the environment and not in the last by the own offer at a competitive quality-price rate;
- the diversification of own products and services provided as well as the presentation of some integrated products meant to ensure all the facilities in the same package (meals, entertainment etc.);
- the flexibility and adaptability of the offer to the demand's tendencies;
- the constant and sustained promotion of the products on the market, emphasising the defining characteristics which differentiate them from the competition..

Theoretical frame regarding the CVP model – a step further from the Direct

Costing method

In the hospitality industry the method of cost calculation can be applied with the best results is the Direct Costing method and the Cost Volume Profit model.

The Direct Costing method is based on the principle of separating the variable expenses from the fixed expenses according to the behaviour of expenditure compared to the volume of production and it consists in charging on the products only the variable expenses either fixed or indirect.

Direct costing gives the managerial team relevant information regarding the wording out of the decisions for the activity of the economic entity in the following period.

Direct costing gives the managerial team relevant information regarding the wording out of the decisions for the activity of the economic entity in the following period. This method will provide a basis for the cost forecasts, for the study of the effects of planned changes in the volume of the production, determined by the change of the economic conditions or the management's certain open actions, as for example the changes in price, the increase or the decrease of the stock or the special promotional activity. (Sorin Briciu 2006: 223)

The method emphasises the quickening of sales due to the fact that the size of the fixed costs is not distributed on the stocks (of unfinished products, of finished products), but it must be covered from the period's sales. Also, the emphasis is on the analysis of variable costs and the charging of fixed costs on the (gross) margin on variable costs. The manager of any entity has the break even obligation to maximize the margin on variable costs on which the fixed expenses will be charged. Getting the maximum financial and economic results requires optimizing the correlation of price-cost-volume manufactured products, respectively sold.

This correlation is expressed by means of indicators such as the balance point, the coverage factor, the dynamic safety factor and the safety period . (Sorin Briciu et al 2010: 359). The Cost-Volume-Profit analysis examines the behaviour of total revenues, total costs and the result from operation under the influence of the changes in the volume of production, of the sale price, of the fixed expenses or of the variable expenses.

The managers frequently use the CVP analysis to answer questions of the type: How will the total costs and the total revenues are influenced if we sell with 1,000 units more? How will the level of production be affected if we increase or decrease the sale prices? All these questions have a common subject: What if...? (Charles T Horngren et al 2006: 68)

That amount of production sold for which the total revenues equal the total costs is called the break even point; in other words, it reflects the amount of production sold for which the operating profit is zero. The managers are interested in the level of the break even point as it tells them what the minimum amount of production that must be sold not to record losses is.

In the speciality literature there are three methods to determine the break even point: the equation method, the marginal contribution method, and the graphic method.

In order to use the equation method (arithmetic calculus) in order to determine the break even point, the operating profit (the gross operating outcome) is expressed:

$$PE = CA - CV - CF \text{ sau } PE = (PV_u \times Q) - (CV_u \times Q) - CF$$

$$PE = Q \times (PV_u - CV_u) - CF$$

The marginal contribution method is a variant of the equation method mentioned earlier and it considers that the balance point is that value of the turnover for which the fixed costs equal the total contribution margin on the variable expenses (Mv).

The unit variant of this margin (the unit margin on the variable expenses) expresses the increase of the profit with each supplementary unit of product sold. Thus, it will contribute to cover the losses undertaken by the enterprise until the break even point is reached. From that moment on, each extra unit sold will determine an increase in profit.

This statement hold true as long as it does not exceed the value of the floor for which the fixed expenses were determined (Nadia Albu și Cătălin Albu 2003: 206).

$$Q \times (PV_u - CV_u) = CF + PE$$

In other words

$$M_v \times Q = CF + PE$$

$$Q = \frac{CF + PE}{M_v}$$

At the level of the break even point the operating profit is by definition zero. If $PE = 0$ the previous equation becomes:

$$\text{The breakeven point expressed in units} = \frac{CF}{M_v}$$

To calculate the break even point in terms of revenues

$$M_v \% = \frac{M_v}{PV_u}$$

To reach the break even point the marginal contribution must be equal with the fixed costs, therefore:

$$\text{The breakeven point expressed in revenue} = \frac{CF}{M_v \%}$$

The break even point can be used also to determine the physical volume of the activity so that a certain profit is obtained (P) (Chirata Caraiani și Mihaela Dumitrana 2004 : 161). The calculus relations are :

$$\text{In physical units } Pr_p = \frac{CF + P}{Ca^*}$$

where : Pr_p = break even point to reach the profit P

$$\text{In monetary units } CA_p = \frac{CF + P}{Rc}$$

where : CA_p – the necessary turnover to obtain the profit P

R_c - the rate of global contribution

With the help of the equilibrium point or the break even point the necessary turnover to reach a certain rate of return (profit/sales) can be computed. If the managerial team of an economic entity decides to reach and maintain the enterprise at a certain rate of return, they can find with the help of the break even point what volume of activity ensures this target. The calculus relation is

$$CA_{RP} = \frac{CF}{Rc - R_p}$$

where: CA_{RP} – the necessary turnover to reach a certain rate of return

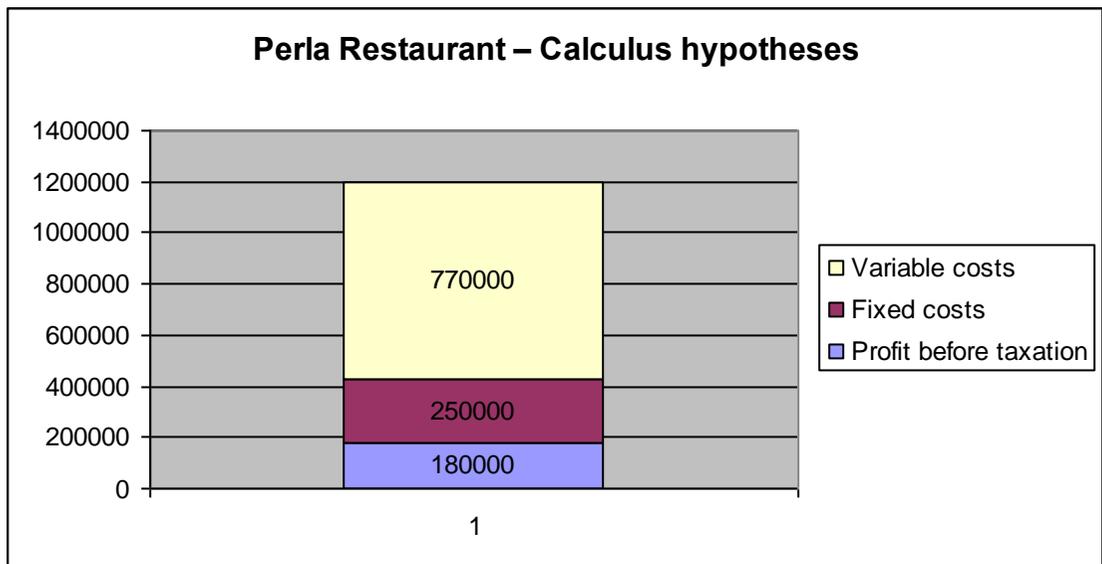
R_p – rate of return

The equilibrium point and the foreseen profit in a restaurant

From a restaurant owner or a restauration entity manager's perspective the problems are:

1. How many clients should I serve on average in a month to wholly cover the expenses?
2. Starting from a certain level of return that I target or it is imposed on me, how many clients should I serve in a month on average?
3. Suddenly some fixed costs rose, as well as the cost of utilities or the level of rent. What is the impact on the number of clients that I should serve so that I do not reduce the business' profitability?

To answer these questions, some simple calculus can be made for the last year activity of Perla Restaurant, a category I restaurant, about which we know that it had a turnover of 1,200,000 RON, it had approximately 20,000 clients in a year, had a gross profit before taxation of 180,000 RON and the fixed expenses for the year reached the value of 250,000 RON.



With the help of these figures we can calculate how much a client on average for the meal served in Perla Restaurant that is 60 lei.

If the profit of the restaurant was of 180,000 lei, knowing that the value of the fixed expenses is of 250,000, it means that the difference to the turnover is the variable costs of this restaurant which amount to 770,000 lei. If the number of clients is of 20,000 it means that the value of the variable cost on the client is of 38.5 lei.

Using the Cost-Volume-Profit analysis we can answer the most interesting questions with the help of the instruments available to us:

1. The number of clients absolutely necessary to cover all the expenses (this point is called in the Anglo-Saxon system Break Even Point):

$$\text{Break even point number of clients} = \frac{\text{Total fixed costs}}{\text{Average bill} - \text{Variable cost on the client}}$$

$$\text{Break even point number of clients} = \frac{250,000}{(60 - 38.5)} = 11,628$$

Therefore the entity analysed needs 11,628 clients to cover all the costs, this means on average 969 clients a month or 32 clients a day. Any supplementary client served over this point starts to build the profile of the Perla Restaurant.

The main problem of the restoration that is trying to be solved through marketing is maximizing the capture rate, an indicator similar to a hotel occupancy rate, defined as the ratio between the number of seats filled and the number of available seats in a restaurant. This goal translates into an attempt to attract more customers in the restaurant or retain current customers. (Puiu Nistoreanu 2005).

2. How many extra clients should have come in Perla Restaurant for the profit to be 200,000 lei?

$$\text{Number of clients} = \frac{\text{Total fixed costs} + \text{Desired profit level}}{\text{Average bill} - \text{Variable cost on the client}}$$

Adding in the previous formula the value of the desired profit, the result becomes 20,930, that is 9,302 clients extra a year, or an average of 25 clients a day. How do we bring these extra clients in Perla Restaurant, what promotion campaigns should we initiate, what changes are required,

can we do anything in this view? It results from here, from these dry figures a series of problems occur related to the management of the restaurant, the concept of the restaurant, the planning of the menu, the constant analysis of sales using well known instruments such as “Menu Engineering”, the measures taken in the menu as a result of each analysis, the promotion actions etc.

3. Let us assume that Perla Restaurant has a period of negotiations with the owner of the location regarding the rent. The fixed costs will increase with 10% if the restaurant’s operator accepts this increase.

$$\text{Number of necessary supplementary clients} = \frac{\text{Supplementary fixed costs}}{\text{Average bill} - \text{Variable cost on the client}}$$

The increase in rent will bring supplementary fixed costs of 25,000 RON and the impact on this rise in the supplementary number of clients rises to 1,163.

These are only some of the questions that can be answered with the instruments of the Cost-Volume-Profit analysis. The principles according to which these formulas are build and changed in order to find the necessary answers are sufficient and they represent the basis for the solving of the problems regarding the reaching the profit targets not only in the restaurant but also in the accommodation division or another centre of profit important for a business entity in the hospitality industry.

The use of these formulas is not very complicated but as it can be seen there is a need for healthy financial information to be able to work with accurate figures. To get here, if we are talking about a hotel, its financial statements must suffer a series of operations. A separation of revenues and expenses of each profit centre must be made and once this operation is achieved, in the concrete case of the restaurant, in most cases there occurs a supplementary problem because it obtains the turnover from several types of activities than the sale in a la carte system.

If in the restauration sector there are revenues even from the event organization, breakfast is served, half-board or full-board meals are organized etc., then it is necessary supplementary work to delimitate these activities. By correctly organizing the informational system, through a correct implementation of the restaurant software, a large part of these activities can be made yet automatically. It is up to the financial service or an expert in the field to find the best way to reduce the complexity of the case for the formulas of the type exemplified to be applied.

The Cost-Volume-Profit is one of the main instruments in the administration of any business in the hospitality industry. Adopting these work methods represents a huge step forward compared to the pub system well spread in Romania.

Conclusions

To cope with the current conditions in the national economy, the service supply firms and the restaurants generally can take precautions in order to avoid quality variations, which have an impact on the number of clients, on the turnover, on the profit, too:

- careful personnel selection, hiring and training;
- incentives for the employees meant to emphasize the importance of their work’s quality, for example, rewards of the “the employee of the month” type;
- freedom for the employees to see and talk to the client in order to particularize the offer;
- the improvement of the employees’ work by installing helping technology (professional equipment).

The service suppliers must make efforts to refresh the identity of the goods in the relation with the consumers as the services have as a characteristic the lack of ownership (an exquisite dinner in a restaurant providing a pleasant environment is just an impression as compared to a good which you use for a long time). This can be achieved through the following methods:

- Stimulants for the consumers frequently using their services (discounts for the clients of the restaurant);
- Creation of special events for the clients, a type of exclusive club.

The Cost Volume Profit model, as it has been mentioned before, can be the main key for an efficient management of a business in the hospitality industry, due to the fact that it allows the calculus of some indicators with decisional valences, and not only, indicators which will provide information regarding the production, sales and short-term promotion decisions.

The break even point represents that degree of the production capacity usage (accommodation, production section) where the costs are fully recovered without obtaining a profit. For the culinary dishes the calculus of the break even point can be done on each sort or group of dishes. Thus, those dishes requiring a high consumption of work and which do not bring profit can be eliminated from the production.

Each of these indicators have a special importance in capitalizing the short-term decisions, that is why we intend to analyse them and the influences that they have, in our future scientific approaches.

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HOW ROMANIAN FINANCIAL AND INTERNAL AUDITORS ACQUIRE ACCOUNTING INFORMATION SYSTEMS KNOWLEDGE AND COMPETENCES?

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Research theme – in this article we investigate how Romanian financial and internal auditors acquire accounting information systems knowledge and competences and how they use this knowledge to improve their activity in order to fulfill their mission as required by the professional standards.

Objectives – our main purpose is to establish through what type of courses Romanian financial and internal auditors acquiring accounting information systems knowledge and competences and how useful these courses are perceived by the auditors.

Prior work – audit professional organizations prescribed that auditors must acquire, maintain and develop their knowledge and competences. Information technology and information systems are considered to be a main knowledge component of professional development programs. The scientific literature indicates that auditors have to enhance their information systems knowledge in order to cope with the increasing complexity of the client's entities accounting information systems. We consider that our article embraces Curtis et al. (2009) call for research on how auditors obtain information systems knowledge.

Methodology – an electronic questionnaire was created and sent to Romanian financial and internal auditors, which were required to indicate the number of accounting information systems course they attended and how the knowledge gained improved their activity.

Results – We concluded that financial auditors acquire accounting information systems knowledge mainly by attending the courses organized by the Chamber of Financial Auditors of Romanian, while internal auditors by attending the course organized by the companies they are working with.

Implications - The results of this study might be used by Romanian professional audit organizations in reconsidering their priorities regarding the accounting information systems knowledge and competence needs of their constituents.

Originality/Contribution – Our study is the first one to investigate how financial and internal auditors acquire accounting information systems knowledge.

Keywords: accounting information systems, auditors, knowledge

JEL Classification: M42

Introduction

Auditors, both financial and internal, have to acquire and develop their skills and competences in order to be able to fulfill their mission in a professional manner as required by their professional organizations. One of the major, and growing, domains of the skill and competence requirements consists of information technology [IT].

In this respect, The International Federation of Accountants (IFAC) issued the International Education Standard (IES) 8 *Competence Requirements for Audit Professionals* which indicates that the knowledge content of the education and development programs should include information technology (IES8, 2010: par.32). Further, the International Education Practice Statement (IEPS) 2 *Information Technology for Professional Accountants* indicates the IT knowledge and competence requirements in the pre- and post-qualification stages of candidates

and of audit professional. The Institute of Internal Auditors (IIA) issued the *Internal Auditor Competency Framework*, a work-in-progress document which indicates the minimum level of knowledge and skills needed by internal auditors in accordance to their position and experience in the audit function. The framework consists of four so called “buckets”, one of which is entitled “Knowledge Areas” and prescribes the level of IT knowledge internal auditors should possess.

Literature review

The issue of what IT skills and competences should an auditor possess have long been debated in the scientific and professional literature. Cutting *et al.* (1971: 76-77) considers that auditors should: understand and analyze the concentration of controls in an electronic environment; understand information systems and understand the use of computer auditing software. The authors also stressed the idea that the knowledge acquired should be differentiated depending on the job requirements and the complexity of tasks. Further, Jancura (1975: 59) extended the knowledge requirements of auditors by considering that they should: have sufficient knowledge of information systems to develop the audit plan. Borthick *et al.* (2006) indicated that “accelerating the acquisition of expertise in auditor’s careers is desirable because of increasing demands for audit efficiency and effectiveness, growing sophistication of accounting systems” Borthick *et al.* (2006: 338). The main result of this article is that there is a correlation between structured training and the competences of auditors.

Brazel (2004) suggest that accounting information systems [AIS] expertise is a separate competence domain from that of general audit experience. Such knowledge may affect audit planning judgments and audit quality (Brazel and Agoglia, 2004). The authors indicated that “auditors with higher AIS expertise assessed inherent and control risk as higher than auditors with lower AIS expertise” (Brazel and Agoglia, 2004: 16).

In complex accounting information systems such as Enterprise Resource Planning [ERP] systems, auditors are faced with a greater challenge than in less complex one. Hunton *et al.* (2004) found that auditors are highly confident in their ability to assess risks in ERP systems and less complex systems and they don’t indicate a greater need to consult IT specialists or computer assurance specialists in complex environment.

For the internal audit profession and function, Kim *et al.* (2009) indicated several intra-organizational and extra-organizational factors which influence technology acceptance and use. Among these factors the authors identified internal and external training is more influential on technology acceptance for internal auditors as they consider that such knowledge would have a beneficial effect on their job (Kim *et al.* 2009, citing Braun and Davis, 2003).

Curtis *et al.* (2009: 79) presents a review of the existing literature examining auditor’s knowledge and training in information systems. The authors covered aspects such as: the environment of information systems in financial reporting and assurance; how financial statements auditors acquire and use information systems knowledge and finally, the interaction between financial statements auditors and information systems auditors. We consider that our article embraces Curtis *et al.* (2009) call for research on how auditors obtain information systems knowledge.

Research questions and methodology

Based on the requirements of the professional standards and the supporting scientific literature, we identified that internal and financial auditors must acquire and develop their information technology and information systems knowledge and competences. Professional organizations require that such knowledge to be acquired by candidate auditors and professional ones to, during development programs. Further, professional auditors are required by their organizations or by the complexity of their client’s information systems to expand their competence and knowledge.

For the purpose of this article we intend to investigate how Romanian financial and internal auditors acquire accounting information systems knowledge by attending courses: held by the professional organizations they adhered to, held by the organizations they work with; or from their own initiative. We consider that these forms of training are the most suitable way in which auditors can acquire accounting information systems knowledge and competences. Based on the aim of this article, stated above, we formulated the following research questions.

RQ1: Through what type of courses are Romanian financial and internal auditors acquiring accounting information systems knowledge and competences?

RQ2: How useful these courses are perceived by Romanian financial and internal auditors?

To answer these questions an electronic questionnaire was created and sent to financial auditors, members of the Chamber of Financial Auditors of Romania, and internal auditors, members of the Association of Internal Auditors of Romania. The questionnaire was sent to 1.288 valid e-mail addresses of financial auditors, receiving 97 valid answers (answer rate: 7,53%). To contact the internal auditors, the representative of the Association of Internal Auditors of Romania sent the questionnaire to 567 members and we received 38 valid answers (answer rate: 6,70%) (Cardoş, 2010). Although the answer rate are relatively low, they still allow us to draw our conclusions regarding the way in which auditors attended accounting information courses and the perceived improvement of their activity after attending these courses.

The questionnaire covered several aspects, amongst which we mention: the educational profile and background of auditors, the perceived importance of the accounting information systems impact on their mission and audit opinion, the perceived importance of several IT-related activities an auditor should perform during an audit mission, the perceived influence of ERP systems on the audit opinion.

For the purpose of this article we present the questions inserted in the questionnaire, based on which we try to answer the stated research questions.

How many courses in auditing information systems have you attended in the last three years?

- (1) Held by the professional organization of which you are a member of;*
- (2) Held by the organization/company you are working with;*
- (3) On your own initiative;*

To what extent do you consider that these courses concurred to the improvement of your activity in the audit mission you were participated in?

- (1) to a very little extent;*
- (2) to a little extent;*
- (3) to some extent;*
- (4) to a great extent*
- (5) to a very great extent*

Results

Because between the aspects covered by these questions there is a strong correlation we will analyze them in correlation and will focus only on the answers regarding the perceived influence of the accounting information systems courses of those respondents who indicated they participated in at least one course.

We begin our analysis by focusing on the answers provided by financial auditors. We present below (Table 1) a cross-tabulation between the extent to which attending accounting information

systems courses improved the auditors' activity. By this we filter the respondents which answered both questions indicated above.

Table 1: Cross-tabulation (attended courses x improved activity) – financial auditors

Financial auditors		Valid		Missing		Total	
		No.	%	No.	%	No.	%
(1)	Improved activity X courses organized by professional organizations	61	62,9%	36	37,1%	97	100,0%
(2)	Improved activity X courses organized by organizations auditors work with	24	24,7%	73	75,3%	97	100,0%
(3)	Improved activity X courses attended on own initiative	19	19,6%	78	80,4%	97	100,0%

(Source: Cardoso, 2010: 184)

From the Table 1 we can conclude that of the 97 respondents only 61 of them (62,9%) attended professional development courses in accounting information systems organized by the Chamber of Financial Auditors of Romanian, 24 respondents (24,7%) attended accounting information systems courses organized by the organizations they are working with and only 19 of them (19,6%) attended such courses on their own initiative. A first conclusion we can draw is that Romanian financial auditors acquire AIS knowledge and competence primarily from the courses organized by the professional organizations they adhered to. This is not surprising as to fulfill their continuous development program requirements they have to attend several courses at their choice. As many auditors chose to attend AIS courses it's a sign that they are aware of the importance of such knowledge in their work.

In Table 2, presented below, we can observe the extent to which the courses attended by financial auditors improved their activity.

Table 2: The extent to which attending AIS courses improved the financial auditors' activity

Type of courses Level of improv.	(1)		(2)		(3)	
	No.	%	No.	%	No.	%
to a very little extent	1	1,64	0	0,00	0	0,00
to a little extent	5	8,20	0	0,00	1	5,26
to some extent	19	31,15	3	12,50	2	10,53
to a great extent	25	40,98	14	58,33	9	47,37
to a very great extent	11	18,03	7	29,17	7	36,84
TOTAL	61	100,00	24	100,00	19	100,00

(Source: Cardoso, 2010: 184)

Even though most of the financial auditors attended AIS course organized by the Camber of Financial Auditors of Romania we can observe from Table 2 that they considered the course organized by their organizations or attended on their own initiative to improve to a great or even very great extend their activity during the audit mission they were engaged in. This situation reveals that financial organizations employing financial auditors or financial auditors themselves are more aware of the AIS knowledge needs then the Camber of Financial Auditors of Romania.

We continue our analysis by focusing on the answers provided by internal auditors. We present below (Table 3) a cross-tabulation between the extent to which attending accounting information systems courses improved the auditors' activity. By this we filter the respondents which answered both questions indicated above.

Table 3: Cross-tabulation (attended courses x improved activity) – internal auditors

Internal Auditors	Valid		Valid		Valid	
	No.	No.	No.	No.	No.	No.
Improved activity X courses organized by professional organizations	14	36,8%	24	63,2%	38	100,0%
Improved activity X courses organized by organizations auditors work with	17	44,7%	21	55,3%	38	100,0%
Improved activity X courses attended on own initiative	21	55,3%	17	44,7%	38	100,0%

(Source: Cardoso, 2010: 186)

Based on Table 3 we can conclude that Romanian internal auditors acquire their AIS knowledge mainly from courses attended on their own initiative (55,3%). This might be a consequence of the fact that the Association of Internal Auditors of Romania is a relatively new professional organization in the Romanian audit environment and internal auditors had to rely on the course offered by the organization they were working with or on their own initiative.

Further, in Table 4, we present the extent to which the courses attended by internal auditors contributed to the improvement of their activity.

Table 4: The extent to which attending AIS courses improved the internal auditors' activity

Type of courses Level of improv.	(1)		(2)		(3)	
	No.	%	No.	%	No.	%
to a very little extent	0	0,00	0	0,00	0	0,00
to a little extent	1	7,14	0	0,00	1	4,76
to some extent	2	14,29	6	35,29	7	33,33
to a great extent	7	50,00	7	41,18	6	28,57
to a very great extent	4	28,57	4	23,53	7	33,33
TOTAL	14	100,00	17	100,00	21	100,00

(Source: Cardoso, 2010: 186)

In the case of internal auditors we can observe that they consider the AIS courses organized by their professional organization as improving their activity to a great and even very great extent. This suggests that the Association of Internal Auditors of Romania gives a greater importance to AIS knowledge and competences that an internal auditor should possess. Still, the AIS courses offered by organizations employing internal auditors or the internal auditors themselves influenced to at least some extent the improvement of the auditors' activity during their mission.

Conclusions

Regarding the first research question stated, we conclude that Romanian financial and internal auditors are acquiring AIS knowledge and competences needed to perform their mission in a professional manner in a differentiated way. Financial auditors gain such knowledge by attending AIS courses organized by their professional organizations, while internal auditors by attending such courses on their own initiative.

As for the second research question we have to differentiate again between financial and internal auditors. The first group of audit professionals indicated that the courses organized by the organizations they work with contributed to a great or very great extent to the improvement of their activity, followed by the courses attended on their own initiative. In the case of internal auditors, the courses organized by the professional organizations they are members of, proved to influence to a great or even very great extent the improvement of their activity followed by the courses organized by the organizations they are working with.

A limitation to this study might be posed by the fact that the answer rate to the questionnaire was relatively low and that we included in our study only the internal auditors members of the Association of Internal Auditors of Romania, neglecting the internal auditors adhered to the Central Harmonization Unit for Public Internal Audit.

We consider that the results of this study might be used by Romanian professional audit organizations in reconsidering their priorities regarding the accounting information systems knowledge and competence needs of their constituents.

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MANAGERIAL AND COST ACCOUNTING PRACTICES – A ROMANIAN OVERVIEW

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Research theme – Globalization and technological changes generates complexity both in the business environment and the accounting systems. Under these conditions managerial accounting needs to learn new practices in order to become an active consultant of management.

Objectives – The main objective of this paper is to present how managerial accounting changed over the years in Romania. We intend to present how the managerial accounting system is implemented within Romanian organizations, to report the level of adoption of traditional practices, tools and techniques, to identify to what extent contemporary managerial accounting practices are implemented and used, and finally to identify whether managerial accounting information is useful for business decisions.

Prior works – Over the years researchers from all over the world were interested in managerial accounting changes and innovations, in managerial accounting practices, tools and techniques adopted by organizations. On international level the study made by Pavlatos and Paggios (2009) and on national level the study made by Jinga et al (2010) represents the starting point of our study. Both research team conducted a study on managerial accounting practices and the utility of managerial accounting information and found out that managerial accounting information is useful for managers in the decision making process but traditional practices, tools and techniques are used to “produce” this type of information.

Design/methodology – An empirical study was conducted in 2010 within Romanian accounting professionals. A questionnaire was sent to a number of 1871 professionals members of The Body of Expert and Licensed Accountants of Romania regarding managerial accounting practices, tools and techniques adopted and implemented. Data obtained was processed and analyzed with the help of descriptive statistics.

Results/findings – Romanian professionals consider that managerial accounting information is useful for management in the decision making process but these information are “produced” using traditional managerial accounting practices, tools and techniques are preferred by Romanian organizations in the detriment of modern practices like activity based-costing or target costing.

Implications – The results of our study represents a reference point for both researchers and practitioners who are willing to carry on future research in the field of managerial accounting.

Originality/Value – This paper tries to fill a gap in the literature related to the Romanian managerial accounting systems and practices. Moreover, it present an overview of managerial accounting practices within Romanian companies giving the possibility to formulate suggestions and proposals for its future development and evolution.

Keywords: managerial accounting, cost systems, practices, empirical survey, Romania

JEL classification: M41- Accounting and Auditing

1. Introduction

In today's fast changing business environment, where knowing more and knowing it faster than the competition is often the difference between surviving and not surviving, organizational learning and knowledge management becomes a crucial organizational function (Huber 1998:1). This organizational function leads to rethinking managerial practices and tightly related to this reshaping the existing accounting systems especially the managerial accounting systems.

At international level there is an intensive debate on the changing role of managerial accounting and managerial accounting professionals (Jarvenpa 2007). Researchers believe that managerial accounting is being oriented from being a scorekeeper or a bean counter towards an increasingly business oriented role (Burns and Baldvinsdottir 2005; Jarvenpaa 2007; Warren and Parker 2009). Moreover, they consider that new managerial accounting techniques like strategic cost management, activity based costing, balanced scorecard or customer relationship management enhance the business orientation of managerial accounting.

On national level, changes generated by globalization, intensive competition, the automation of production processes penetrated more slowly, especially because of the political, social and economical context of our country. That is why managerial accounting in Romania has had a different evolution, has met different approaches, goals and objectives (Cardos et al 2010:58). Anyway, managerial accounting information is essential in gaining competitive advantages, is an indispensable instrument for the decision making and that is why, in order to survive, Romanian companies are being forced to align to the new tendencies and technologies, to reinvent their activity in accordance with market and customer needs (Jinga et al 2010).

These changes identified on international and national level encouraged us to do research in the field of managerial accounting. Our objective is to present an overview of Romanian managerial accounting in practice. We try to find answers to the following questions: How managerial accounting evolved in Romania over the years? What kind of managerial accounting practices, tools and techniques are preferred by Romanian practitioners? Is managerial accounting an active advisor of the management in Romanian organizations? To what extent are managerial accounting information used in the decision making?

2. Studies made in the field of managerial accounting – literature review

At international level there has been an intense debate on the role of managerial accounting in recent years. Accountants, researchers and consultants have sought to develop different kinds of advanced managerial accounting innovations and systems in order to cope with the needs of today's turbulent, global and technology-driven world (Jarvenpaa 2009). Because of these changes researchers from all over the world tried to evaluate how managerial accounting research developed (Hopper et al 2008); to identify how traditional or new managerial accounting practices and techniques were adopted and implemented within organizations (Falconer 2002; Gupta and Gunasekaran 2005; Hopper and Major 2009; Pavlatos and Paggios 2009).

A relevant study and starting point for our study was the one Pavlatos and Paggios made in 2009. They tried to identify the managerial accounting practices implemented in the Greek hospitality industry, especially to report the level of adoption and the benefits derived from traditional and contemporary methods and techniques. Their findings show that traditional managerial accounting is "very much alive and well" (Pavlatos and Paggios 2009:81). Traditional techniques, such as standard costing, budgeting, are still widely adopted than recently developed tools.

In Romania managerial accounting had a different and slower evolution; it was strongly influenced by political and social regimes and by the development of the Romanian economy and business environment. For many years managerial accounting was associated with cost accounting and its main objective was to calculate, monitor, analyze and control production cost;

to plan and control the process of resource allocation through budgets and other management tools (Cardos et al 2010). At the beginning of '90 managerial accounting was reconsidered, we witnessed a separation of the two components of the accounting system (financial and managerial accounting). After 2000, influenced by the international literature, managerial accounting experienced a modern approach. New functions and roles like providing relevant financial and non-financial information to management, analyzing and monitoring internal business processes, were associated to managerial accounting.

Over the years Romanian researchers tried to present the evolution of managerial accounting and the managerial accounting profession in Romania (Albu 2006); tried to identify how managerial accounting was perceived by researchers and practitioners (Cardos et al 2010); tried to establish the level of adoption of traditional and contemporary managerial accounting tools and techniques (Jinga et al 2010) and finally tried to evaluate the utility and usage of the managerial accounting information (Glavan et al 2007; Jinga et al 2010).

The study made by Jinga et al in 2010 is similar with our study. They tried: (1) to establish the attitude of the managers within Romanian companies towards the information generated by managerial accounting; (2) to evaluate the utility and usage of managerial accounting information in the decision making process; (3) to identify the specific instruments, tools and techniques used for collecting and analyzing managerial accounting information. Their main conclusion is that managerial accounting information is very useful for business development, for monitoring and lowering costs or to increase the products quality. As for managerial accounting practices the main conclusion is that within Romanian organizations traditional tools and techniques are still used. Managers seems to prefer methods like global absorption method, job costing, direct costing instead of activity based costing or target costing.

We can observe that the Romanian managerial accounting literature is poor, little is known regarding the managerial accounting practice in Romania; there are only a few studies about the role and function of managerial accounting, about the managerial accounting practices, tools and techniques adopted by Romanian organizations in today's changing environment, in the era of globalization and technological change. That is why through our study we intend to fill in a gap in the European and international literature. Moreover, our findings could give us the possibility to formulate suggestions and proposals for the progression and evolution of Romanian managerial accounting.

3. Managerial accounting practices and cost accounting tools and techniques in Romania

Research methodology

The main objective of this paper is to present how managerial accounting is perceived by Romanian practitioners, to report the managerial accounting practices and cost calculation techniques and systems adopted by Romanian organizations and to report if and how managerial accounting information is used by managers. In order to find an answer to these questions we conducted an empirical survey, via questionnaire, among Romanian accounting professionals members of The Body of Expert and Licensed Accountants of Romania. The respondents were asked to indicate: (1) the way managerial accounting is organized; (2) the objectives and functions of managerial accounting; (3) the applied practices, techniques and cost systems; (4) the utility of managerial and cost accounting information in the decision making process.

The questionnaire and a covering letter explaining the purpose of the study and presenting the instructions needed to fill the questionnaire was sent to a sample of 1871 certified accounting professionals. Finally, we received 178 responses, generating a response rate of 9.52%. Of the 178 responses 32 were eliminated, remaining 146 valid responses. The collected data was processed using SPSS and was analyzed and explained with the help of descriptive statistics.

Research findings

After processing the data obtained we found out that the respondents came from various industries. Services were represented by 53.4% of the respondents, followed by the manufacturing industry with 26% and trading with 13.7%. Besides these industries other activity sectors like public and local administration, banking or healthcare was represented by 6.8% of the respondents.

Romanian organizations seems to recognize the importance, necessity and utility of managerial accounting as they implement a managerial accounting system but they do not rely very much on current regulation preferring to develop their own systems and techniques in accordance with their specific activity. The results shows that 9.6% of the respondents developed a separate managerial accounting system considering the actual regulations; 43.2% of the respondents are using an integrated accounting information system; while 39% developed a specific managerial accounting systems and adopted specific methods and techniques in accordance to their activity and internal processes (Table nr. 1).

Table nr. 1 – The development of managerial accounting systems

Adoption and implementation of managerial accounting systems		Frequency	Percent	Cumulative percent
Valid	Development of a separate managerial accounting system	14	9.6	9.6
	Integrated accounting systems (for financial and managerial accounting)	63	43.20	52.80
	Development of specific managerial accounting systems in accordance with activity	57	39.00	91.80
	Non respondent	12	8.2	100.0
Total		146	100	

Source: author's projection

As for the objectives and functions of managerial accounting reducing and optimizing costs, cost calculation of products and services, budgeting or providing cost type of information for the decision making is considered to be a top priority of managerial accounting within Romanian companies. On the other hand objectives like identifying and eliminating activities which doesn't add value or control and improvement of internal business processes are considered to be not so important (Fig. nr. 1).

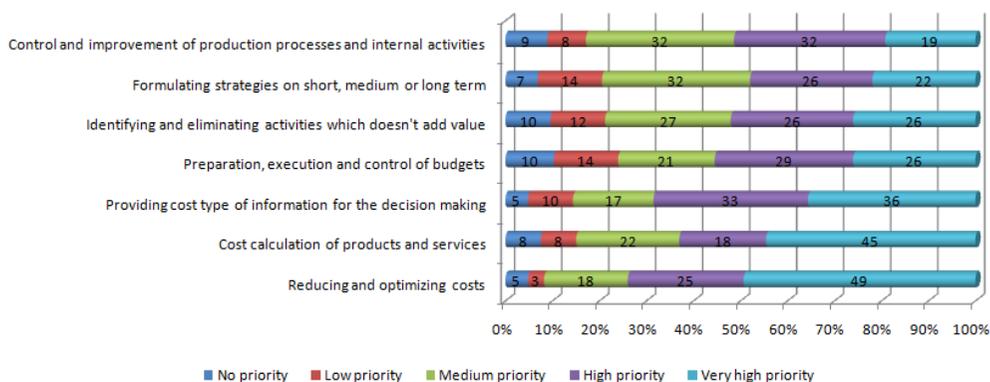


Fig. nr. 1 – Objectives and functions of managerial accounting in Romania

Source: author's projection

An other objective of our study was to found out what are the managerial and cost accounting tools and techniques used by Romanian practitioners. After analyzing the data collected we found out that (Fig. nr. 2) traditional managerial accounting practices like global method, job-order or process costing, standard costing are widely adopted and implemented by Romanian companies. They do not place great emphasis on more recently developed tools and techniques like activity based costing or target costing. The figure below shows that only 6.2% of the respondents implemented successfully activity based costing method and 3.42% implemented target costing while the majority has heard about these methods but never considered implementing them or abandoned the implementation process.

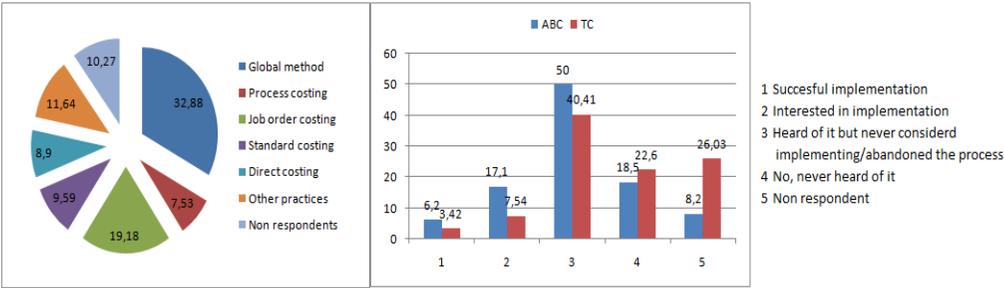


Fig. nr. 2 – Managerial and cost accounting practices, tools and techniques
Source: author’s projection

Romanian practitioners seem to be pleased by traditional managerial and cost accounting practices and techniques and with the results obtained. They consider that contemporary tools and techniques require high implementation and maintenance costs; complex and complicated design and work processes.

After presenting the main aspects regarding managerial accounting practices within Romania companies the final objective of our study was to present to what extent managerial accounting and cost type of information is used in the decision making process. Our results indicates that managerial accounting is an advisor of management, the respondents considering that the information provided are useful for business development; in operational, tactical or strategic decision making. Moreover, based on cost type of information managers can take decisions regarding the improvement and design of internal production and business processes; the distribution and trade of products and services; performance measurement; investments or finances (Fig. nr. 3).

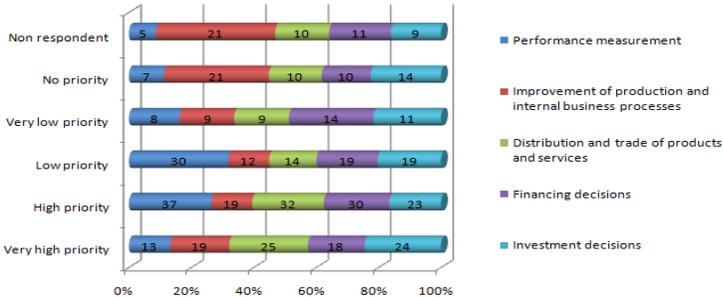


Fig. nr. 3 – The utility of managerial and cost type of information in decision making
Source: author’s projection

4. Conclusions

With our study we tried to find out the way managerial accounting is organized within Romanian companies; the objectives and functions of managerial accounting; the managerial and cost accounting practices; and whether managerial and cost type of information is useful or not in the decision making process.

Our results are in line with the conclusions drawn by Pavlatos and Paggios (2009), Albu (2006) or Jinga et la (2010). Romanian companies seem to recognize the importance and utility of managerial and cost accounting as they are implementing managerial accounting systems integrated or separated by the financial accounting system. However, in this implementation process they do not rely on current regulations, rather preferring to develop their own methods, tools and techniques adapted to their specific activity. Despite these concerns we consider that Romanian companies rely mostly on traditional practices and techniques neglecting contemporary and recently developed tools.

Our results indicate that managerial accounting is closely related and tied up with cost accounting. This strong connection between them derives from the use of contemporary managerial and cost accounting practices and techniques which are not adapted enough to face new production and market conditions or the needs of competition. Romanian companies are too preoccupied with cost calculation and management, with budgeting or with the improvement of internal production and business processes and in the same time they tend to neglect the customer's needs, market conditions and intensive competition.

We consider that in a world of globalization and intensive competition; in the era of automated and advanced production processes and technologies more attention should be given to the orientation towards market and customers, along with attention given to customer behavior, buying behavior patterns and customer profitability. Under these conditions Romanian companies will be forced to implement advanced managerial accounting practices, tools and techniques in order to improve their cost control and cost management systems; to improve the performance indicators; to realize an accurate analysis of customer profitability analysis and performance measurement.

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PROFESSOR I.N. EVIAN-PRECURSOR OF ACCOUNTING SCHOOL FROM CLUJ

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Our paper is about the history of accountancy in Romania, in Transylvania. We develop this subject because we consider that is very important to know about the history of your own country, and from our point of view about the history of accounting, which is a very important component of nowadays life. This work paper presents the history of the accountancy through the study of biography. So by describing the work of professor I.N. Evian, who was an important personality for the accounting history in Romania, we want to find historical elements that are not so able to see otherwise. The article wants to highlight the impact that the work of professor Evian had in the history of accounting in Romania. Also, by presenting the work of professor I.N. Evian in the context of the Academy of High Commercial and Industrial Studies from Cluj, we want to prove that this institution was the first form of higher education in Transylvania in the accountancy field.

Key Words: accountancy, personalities, accounting theories

Cod JEL: M41, B10

I. Introduction

The history of accounting is largely the history of civilization (Woolf, 1986). Professor Nicolas Feleaga supports this assertion, stating that, "It is easy to understand that one's negligence to study the past, to know one's history, amputates one's means of developing the country economically, socially or in a field less enviable as accounting". Accounting is a human construct. In the present context, accounting cannot be understood without reference to the key personalities who have contributed to its development. (Parker, 1993) That is why this article aims to present the scientific work of one of the professors of the Academy of High Commercial and Industrial Studies in Cluj-Napoca, considered the first form of higher economic education in Transylvania.

The importance of Professor I.N. Evian's activity in the field of accounting, at the Academy of High Commercial and Industrial Studies in Cluj, supports the affirmation that this institution was the first form of higher education in the field of accounting, and that the work of the Professors of the Accounting Academy (and beyond) are the landmarks for today's accounting. The focusing of attention on the Academy of High Commercial and Industrial Studies in Cluj is due to the historical particularities that this area of Romania experienced thanks to the Habsburg rule, which left its mark on accounting reasoning. The organization of higher education in Romanian, in Transylvania, more specifically in Cluj-Napoca, had innumerable trials and obstacles, but eventually succeeded in establishing a form of higher economic education, which is today the precursor of the largest Faculty of Economic Sciences in Romania.

Early accounting literature in Romania has its origins in the second half of the nineteenth century, in Transylvania. The first book in Romanian was written and published here, and here Professor Evian, from the Academy of High Commercial and Industrial Studies would publish a book considered the root of the accounting literature in Romania. The works written in the nineteenth century and then, in the time of the Academy of High Commercial Studies, in the field of accounting can be regarded as landmarks in the Romanian accounting of today. This paper is a description and a qualitative analysis of Professor Evian's activity. It aims to identify the Professor's concerns at the Academy, in the field of accounting and journalism.

This article is a part of and supports the paper that will discuss the beginning of the Accounting School of Cluj. The article is structured in three parts. The first part presents the methodology used in the approach and writing this paper. The second part is the content of the article, which presents Professor Evian's work, and a brief presentation of his work "Theory of accounts". Finally, we present the conclusions on the theme discussed.

II. Literature review

This work paper it can be placed together with the ones written in the history of accounting. Writings on this subject were written by few other authors from our country: C.G. Demetrescu (1930), Daniela Artemisa Calu (2005), Dana Pop (2005), Adriana Tiron Tudor și Dumitru Matis (2010). C.G. Demetrescu (1930) wrote „ *The History of the Accountancy*”, a book in which the author presents the development of the accountancy in the world from the very first beginnings till the second half of the 20th century. In his book he included a little part about the development of the accountancy in Romania, too.

Daniela Artemisa Calu and Dana Pop, are two authors that concentrated their work on the history of accounting in Romania. The first author wrote the book „The history and development in the accountancy field in Romania”. In this book she developed the evolution of the Romanian accountancy, referring also to the international context. In her book, the author, presents few elements about the work and the theory developed by professor Evian. Dana Pop, with her PhD thesis, brings new elements in the literature about the Academy of High commercial and Industrial Studies from Cluj and about the activity of the professors that activated here. From the title of the book we notice that it is especially a work in the field of economic history, but we discover that there is a lot of accounting history, too.

Adriana Tiron Tudor and Dumitru Matis were interested in the accounting history in Transylvania. For this reason some of the elements presented in their article, could be useful for the writing of this paper. So, the literature which supported the writing of this article was, mostly Romanian, but there were... international authors, like: A. Munslow (2001), MacDonald (1984) or Chua and Poullaos (1993), for the writing of the methodology.

III. Methodology

This paper falls into the category of those that choose to explain the history of accounting in terms of biographical investigations. Such studies propose various decisive factors as determiners accounting personification - social class (MacDonald, 1984), gender (Kirkham and Loft, 1993), political adherence (Willmott, 1986), the relationship with the state (Chua and Poullaos, 1993) and the relation with other professions. (MacDonald, 1984)

In this paper, we have developed a qualitative study of Professor Evian's activity, describing the events as they happened, in order to obtain a better picture of the past. The methodology used is the historiography and study of literature in terms of quality. The qualitative study, as stated by John W. Creswell, quoted by Septimiu Chelcea (2007), "is an approach based on distinct methodological tradition, which analyzes a social or human problem". The aim of our historical work is to

- tell the story of something of the past (Munslow, 2001)
- become aware, assess and judge, and analyze the perspective of others who wrote about the same subject.

In our study, we consulted the latest books and but also older ones, related to the activity of the Professor and that of the Academy of High Commercial and Industrial Studies of Cluj. In these works, we have found paragraphs about the Professor's work. Our contribution is to give more details about the work of Professor I.N. Evian in a single work and to show the connection between this character and the importance of the Accounting School of Cluj.

IV. PROFESSOR EVIAN'S SCIENTIFIC ACTIVITY

IV.1. The contemporaries and the subjects approached by them

As we have already mentioned, the accounting is the result of human actions. Man created it to satisfy various needs; therefore, the human factor is very important for the study of accounting history. Accounting reasoning cannot be otherwise identified, but by studying the works and activities of those who took an interest in this area.

The accounting department was founded at the Academy of High Commercial and Industrial Studies of Cluj. I. Evian was a member of this department, among other professors.

Table 1: The accounting professors from the Academy of High Commercial and Industrial Studies of Cluj

Ion Evian	Accounting
Dumitru Voina	General accounting
Iosif Ioan Gârbacea	General accounting
Ioan Tarța	Financial accounting
Dumitru Hașiegan	Statistics
Octavian Lungu	Accounting

Personal raport

These professors had a rich activity, analyzing various accounting issues, analyzing various studies of foreign authors or were preoccupied with developing theories, such as Professor Evian. The work of these professors was published in the journal of the Academy, „Observatorul social-economic” [*The Social – Economic Observer*].

A contemporary of Professor Evian and a leading figure, was Professor Dumitru Voina. In 1932, he published the book “Stages in the evolution of accountancy”. This book is very important historically because, based on this book; the author structures the accounting for the first time at an international level, over time. However, this Professor also developed the legal - economic theory. I. Tarta was a contemporary with Evian, and also his student. He prepared his doctoral thesis in 1940, "Industrial Costs and their calculation", under the guidance of Professor Evian, who considered this work as being “*the first Romanian scientific work on industrial costs*”.

Iosif Gârbacea was concerned with the study of foreign influences in the field of accounting, so that he wrote two papers that reflect the Italian influence, and one related to the accounting regulations in Germany ("Italian Influence in Accounting", "German accounting rules") and Dumitru Hașiegan and Octavian Lungu were concerned with the study of double entries and trial balance. Along with these professors from the Academy of High Commercial and Industrial Studies, C.G. Demetrescu, Spiridon Iacobescu și Alexandru Sorescu, I.C. Panțu, V.M. Ioachim, professors at the Academy of Bucharest and Iasi, were contemporaries with Ion Evian. (Pop, D, 2005)

IV. 2. Scientific work and activity

The specialty literature considers Ioan Evian a Luca Paciolo for the Romanian accounting history. He developed a theory that finds its sustainability even today, that is why we considered that it the most representative model of personality of the Academy of High Commercial and Industrial Studies of Cluj. Professor Evian was born in Bucharest, where he attended middle school, high school and college. After graduation, he took his doctorate in Leipzig and became a Ph.D. in economic and financial sciences.

Besides with his duties as Professor, Evian had various executive positions. Thus, before the establishment of the Academy of High Commercial and Industrial Studies in Cluj, he had the following positions (Pop, D., 2005):

Director of the State Fisheries (1914-1920)

General Secretary for Transylvania, at the Industrial Affairs Department at the Ruling Council (1919-1920)

Manager of the General Bank, of Tara Romaneasca, Cluj branch

President of the Chamber of Commerce of Cluj (1920-1921)

As of 1922 to 1943, he was a professor of the Academy of High Commercial and Industrial Studies in Cluj, but continued to have other positions, too:

Member of the Supreme Council of National Economy (1922-1928)

Director of the summer courses of "N. Iorga" People's University in Valenii Mountain

Chairman of the Body of authorized and expert accountants in Romania (1942-1947)

Founder and Chairman of the Accounting Research and Business Economy Institute (1943-1947)

Ion Evian published numerous studies and articles in various periodicals, he wrote courses and published books. Of the courses he wrote for Academy students, we mention:

Comerț exterior și legislație vamală”, [External commerce and customs legislation] 1924

„Studiul practic al întreprinderilor comerciale și industriale” [Practical study of the commercial and industrial enterprises], 1927

„Economia întreprinderilor” [Economy of enterprises], 1939

Among the books published by John Evian, "Theory of accounts" is his masterpiece. Besides this book, he also wrote, "Double Accounting", Bucharest 1946, "Industrial Accounting", Bucharest, 1947. These books are not his only books, but they are the most representative ones.

"Theory of accounts", was published in Cluj in 1940. Based on this book, I.N. Evian draws a line between the accounting theories and the theories of accounts. According to the author's theories, the accounts represent "the attempt to explain and demonstrate the double formalism, meaning the registration of any accounting transactions twice on opposite sides of the accounts" (Evian, IN, 1940:7), while accounting theories "aim at systematic and main treatment of the entire area of accounting" (Evian, IN, 1940:8). Contemporary with Evian's theory, the patrimony theory was developed by the Sp. Iacobescu and Al. Sorescu. So, Evian's work represents the competing theory to the patrimony theory. Ch Cristea, quoted by D. Calu (2005), believes that, "if we take into consideration the keen spirit and the logic of explaining the economic phenomena, shown in Evian's work on most issues, the denial of accounting as independent science can be made only by the fact that in our country, the main exponent of the economic theory related to *double entry* was blinded by the passion of the controversy with the representatives of the patrimony school".

In his study, Ion Evian started from the German accounting literature, and then he told his own opinion. His theory is purely economic and categorically rejects the scientific nature of accounting, which he thinks to be just a technique for completing the enterprise economy.

In the preparation of his theory, the author starts from the static theory on the balance. Thus, the company's asset is represented by the estate, which, in his view, is made of all elements that help the company to achieve its goals, and that can be measured in money. Evian explains the *debtors* account, represented by receivable rights, not by tangible assets, as "an element of the assets that takes only a temporary form of impalpable wealth". (Calu, DA, 2005:110).

Professor Evian explains the *liability* as "the adjective *liability* describes the capacity of a person or a thing to be non-active, so it means to stay still. In this static situation, we may find the first explanation, adequate to characterize the total capital of the company by classifying it as *liability*." (Calu, DA, 2005:110)

Evian presents the equality of the assets with liabilities by the following formula

Total Assets = Total capital.

The theory developed by Professor Evian was proved wrong (C.G. Demetrescu, Gr. Trâncu), but also supported (D. Voina).

V. Conclusions

The approach of accounting history from the point of view of personalities who distinguished themselves over time in this area is something increasingly common in the literature. Biographical references often help us to capture certain aspects of accounting history that would otherwise be unnoticed. So, to capture that Professor Evian is a leading figure in the accounting history of Romania, and that he represents the School of Accounting of Cluj, we tried to present his scientific work.

Evian's theory is one of the most representative and current theories of Romanian accounting, so that this professor may be considered Luca Paciolo for the accounting history in Romania. Ion Evian is considered a historical personality in accounting. Besides being a professor, he was a practitioner and a representative of the accounting profession in Cluj-Napoca. Besides the presentation Professor Evian's work and activity, our study may continue with the activity of the other professors of the Academy of High Commercial and Industrial Studies in Cluj.

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ACCOUNTING FOR SUSTAINABILITY: WHAT NEXT? A RESEARCH AGENDA

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This working paper responds to increasing calls for more and different forms of accounting research involvement in accounting for sustainability. It seeks to provide background, clarify the accounting research issues, and suggest research methods. The background analysis indicates that accounting for sustainability must go beyond supplemental reporting of ecological and social information to include such emerging issues as integrated reporting of sustainability information along with financial reporting. Additional emerging issues are needs of users of sustainability reports, auditing and other assurance of sustainability information, and sustainability implications of financial failure, accounting and auditing failures, and lack of enforcement. Analysis of integrated reporting against traditional financial accounting theory concepts of the purpose of financial reporting and the postulates of going concern, reporting entity, monetary unit, and time period, indicates a need for substantial changes in the traditional financial accounting model if sustainability issues are to be integrated. The agenda concludes with five research issues and methods:

An accounting research framework for sustainability using general systems theory approaches that have been useful for similar emerging issues.

Reporting of sustainability information which has been the focus of most research to date, and the emerging important topic of integrated reporting.

Users of sustainable information, their uses and perceived needs, an area that has been largely neglected in research to date.

Auditing and assurance issues that are taking on greater importance as more users demand assurance for sustainability information. Issues include standards to be used and users' expectations and reactions.

Financial distress and sustainability consequences of accounting and enforcement failures that are just now being recognized as sustainability issues.

Key words: accounting for sustainability, integrated reporting, needs of users, audit, assurance

JEL codes: M41, O16, M42

1. Introduction

In recent months, calls for more accounting involvement in sustainability issues have become stronger, more frequent, and more urgent. As discussed below, though, there is no common notion of sustainability, especially in an accounting context. For this research agenda, we tentatively, as a starting point, draw upon the classic economist Sir John Hicks who developed the concept of consumption being what would leave a person as well off at the end of the period as at the beginning of the period. Our working notion of sustainability is that a sustainable entity is one that is as well off at the end of a period as at the beginning with respect to use of all resources: e.g. environmental, human, ecological, social, financial, and technological.

Much of the previous research has used the definition of sustainability developed by Buntland (1987) over 25 years ago for the World Commission of Environment and Development of the United Nations. Buntland's definition focuses on sustainable development ensuring that it meets current needs without sacrificing needs of future generations (quoted and cited by Kasperiet, 2011). Buntland's definition while innovative and ground-breaking for the time, can be seen as somewhat obsolete for the current era of research into accounting for sustainability. Among other things, it focuses on external sustainability, i.e. sustainability of ecological and social systems, while the current focus of research into accounting for sustainability is on sustainability of an entity, usually sustainability. As the research agenda progresses, especially with the development of a research framework, a more comprehensive definition of sustainability is expected.

Despite no common notion, the terms "sustainability" and "accountability", usually in environmental and social contexts, are being used widely. New journals are being launched to publish research exclusively or primarily on accounting for sustainability, e.g. *Social and Environmental Accountability Journal* and *Sustainability Accounting, Management, and Policy Journal*. A recent major international academic accounting conference of the International Association for Accounting Education & Research (IAAER) held in Singapore in November, 2010, featured panel discussions of practitioners and academics that called clearly for more involvement of academics to do research in accounting for sustainability, notably in auditing, but also in other accounting roles. At another recent international academic accounting conference, Asian Pacific Conference on International Accounting Issues held in Australia in November 2010, a speaker from a governmental pension fund agency in Australia was somewhat critical of academic accountants' lack of involvement in accounting for sustainability; she indicated that if the academic accountants did not get more involved soon, some other groups would.

Thomas L. Friedman, a *New York Times* columnist and award-winning author, in his recent book on sustainability, *Hot Flat and Crowded*, Release 2.0 (2009), has explicitly used accounting terminology (discussed in more detail below) to describe inadequacies of current accounting practice for sustainability. Major international business-oriented newspapers write about essentially the same issues. Dedicated research in sustainable investing has been ongoing for some five years. Notably, the Sustainability Investment Research Platform (SIRP) (www.sirp.se) in Sweden has been a world leader in such research. It is now recognized by SIRP and others that accounting for sustainability is the ongoing next major research area.

The Principles of Responsible Investment (PRI) Academic Network of the UN (<http://academic.unpri.org/>), among other things, publishes the RI Digest of academic research articles in sustainability. Increasingly, the RI digest has been reviewing accounting research articles, notably about disclosures, e.g. Solomon and Solomon, (2006), reported and reviewed in December 2010. The Centre for Social and Environmental Accounting Research, Accountability, Transparency, Sustainability (CSEAR) (<http://www.st-andrews.ac.uk/~csearweb/>) has been created at the University of St. Andrews in the UK to provide information resources, sponsor workshops, and other activities to help researchers and scholars exploring social, environmental, and sustainability accounting, auditing and reporting and related topics.

In the immediate Middle Eastern revolutionary activity, the terms "sustainable", "accountability", "transparency", and the like are being spoken casually and loosely. The Kuwait Fund in its paid advertisements touts investments in sustainable ventures. News commentators talk about sustainable regimes as opposed to stable regimes. Opposition protestors demand transparency and accountability. It is obviously *much* too soon to develop research implications for accounting for sustainability for these activities. Nonetheless, the increasing use of the jargon of accounting for sustainability cannot be ignored.

One of the major issues in accounting for sustainability it is the lack of a common notion of accounting roles in sustainability, nor even what constitutes sustainability in an accounting

context. The various notions of sustainability and accounting for sustainability, while not conflicting, and indeed complementary, reflect a need for a more detailed accounting research agenda to identify research issues, establish more precise concepts, definitions, and notions to provide near-term future directions. This paper and the agenda it presents are intended to represent a first step in that direction by giving structure to identifying and discussing specific groups of research issues for accounting for sustainability, along with possible methodologies and data sources. The remainder of this paper is organized as follows:

Section 2 presents background information underlying the groups of research issues that are identified.

Section 3 analyzes issues in accounting for sustainability with respect to traditional accounting practice, notably the four postulates of accounting.

Section 4 Presents specific research issue along with research methods and sources. Some of these issues are better developed than others.

Section 5 gives a concluding discussion including identifying contributions of the research.

2.0. Background

During the past few years, many accounting academics, and indeed many accounting practitioners, have viewed sustainability almost exclusively as representing environmental, i.e. ecological, and sometimes social issues, and sustainability reporting as telling how 'green' and socially responsible a company has been. This view of sustainability reflects a common view developed over 25 years ago by the Brundtland commission of the United Nations (UN) that sustainability is meeting needs of current generations without sacrificing future generations' needs (Brundtland 1987). A large number of academic publications reflects this view (e.g. Adams 2010, Gray 2010, and sources cited by them). Panelists at the IAAER conference (2010), however, were clear that current approaches to sustainability reporting are too narrow and inadequate for many reasons; especially the notion of accounting for sustainability is much broader than mere environmental (ecological) and social reporting and the role of accounting involvement must be much broader to include such activities as risk assessment and providing assurance including auditing.

It is now widely recognized, but not well documented in academic publications, that sustainability goes beyond mere environmental (ecological) and social issues, and includes sustainability of an enterprise as a business involving production, sales, and marketing, as well as being sustainable financially, legally, and in other similar ways. Poor environmental (ecological) and social performance can indeed lead to unsustainable business activity as evidenced by such phenomena as consumer boycotts of some large retail enterprises that were viewed as selling products made by suppliers using child labor and other socially and environmentally unacceptable practices. Users of financial information consistently indicate a desire to have more information to allow them to assess sustainability and risk related to sustainability. Thomas L. Friedman (2009), the award winning author mentioned in the introduction, links both financial sustainability in the recent financial crisis and environmental sustainability as being part of the same phenomenon: inadequate accounting that does not adequately consider risk: If the true risks involved in these subprime mortgages or default insurance had been priced into these products, they would never have been rated the way they were. Investors would have been much more wary and demanded much higher yields before buying them, which would have forced the mortgage brokers to be more careful in deciding to whom to give these mortgages and the banks to be more careful in choosing which ones to bundle. (Friedman 2009, pg. 15).

While pricing of products might be viewed as a marketing issue, under IFRS and accounting standards of most industrialized countries, valuation of the cost of the products sold and the

inventory of buyers would require an adequate risk assessment to measure amounts in financial statements of both sellers and buyers. Furthermore, the principle of going concern applies to all valuations in financial statements and underpricing of financial risk raises serious issues of going concern. The going concern principle is essentially the same as sustainability when making financial accounting valuations. (Going concern issues are discussed in more detail shortly.) As a result, sustainability failures in the recent financial crisis related to inadequate pricing of risk in products are indeed issues of accounting for sustainability. Then, when writing about environmental issues discussing a 2005 report of the Millennium Ecosystem Assessment of the United Nations, Friedman comments:

Yet because most nations do not put a price on [the natural resources consumed] they too are ‘underpriced’ and therefore overexploited—with the profits privatized and the losses socialized. (Friedman 2009 pg. 25)

Then quoting the World Wild Life Fund’s Living Planet 2008 Report:

‘The world is currently struggling with the consequences of over-valuing its financial assets, but a more fundamental crisis looms ahead—an ecological credit crunch caused by undervaluing the environmental assets that are the basis of all life and prosperity.’ (Friedman 2009 pg. 25).

Under current accounting standards, the value of ecological resources used would not normally be used to measure product prices or report values in financial reports; thus Friedman seems to advocate a new accounting paradigm for accounting for sustainability that incorporates use of environmental and social resources in accounting measurements. In both of these situations, as well as throughout the book, Friedman, a well read, literate, and articulate writer, but a non-accountant, uses accounting terminology to link both financial and ecological sustainability failures and attribute the cause of both to the same phenomenon, underpricing of assets and products sold due to failure to consider sustainability risk. Similar calls for a new accounting model to incorporate external costs have been made by others, e.g. the Accounting for Sustainability Group (2006) and Epstein (2008).

Recent attention to so-called integrated reporting has come from the Accounting for Sustainability Project (www.accountingforsustainability.org) among other places. As discussed in more detail shortly, this project includes initiatives of the International Integrated Reporting Committee (IIRC) (<http://www.integratedreporting.org/>) to develop a new reporting model that will better reflect the interconnected impact of financial, environmental, social and governance factors. There is, however, no common notion of what constitutes integrated reporting. Many believe that ‘integrated’ is merely including environmental and social information along with financial information, while others view ‘integrated’ as incorporating sustainability factors within accounting measurements.

3.0. Accounting for sustainability with Respect to Traditional Accounting

When environmental (ecological), social, and other social issues reporting are viewed from the perspective of accounting for sustainability, many issues emerge that have not yet been addressed and now need to be examined from the perspective of traditional accounting and financial reporting practice.

3.1. Integrated reporting

The recent call for integrated reporting involves reporting sustainability issues in parallel with financial reports, incorporating sustainability issues in accounting measurements in financial reports, or both. Many inconsistencies arise, though, that have not been considered and should be analyzed along with respect to traditional financial reporting theory and concepts. Among the inconsistencies that arise, in Anglo-Saxon countries, the purpose of financial reporting is expressed as assessing the likelihood and timing of future cash flows, thus implying that

accounting measurements should be ultimately related to cash flow. The theory adds, though that future cash flows are best assessed by accrual accounting. Many of the suggestions about including sustainability into accounting measurements would not involve direct future cash flows, such as use of environmental resources, unless for circumstances when a carbon tax or carbon permits might be assessed. Therefore, it would be very difficult to include such measurements without changing a major aspect of traditional financial reporting theory that exists in most countries. Also, the conceptual framework of the IFRS, US GAAP, and similar concepts of accounting principles in many countries contain the following four fundamental postulates, although these concepts predate both IFRS and the US GAAP conceptual frameworks, and terminology varies.

- Going concern
- Reporting entity
- Monetary unit
- Time period

The **going concern** concept assumes that an entity will be in business for the foreseeable future and will be able to realize its assets and complete its obligations. This concept affects valuation bases for measurements of many items on financial reports. It is also the basis for auditors' reports on financial statements. Sustainability is essentially the same concept as going concern because lack of sustainability implies lack of a going concern, and a sustainable entity must necessarily be a going concern. As discussed in more detail shortly, well-known going-concern failures such as Enron and sub-prime mortgage collapses have resulted massive social costs and clearly represent lack of sustainability. The **reporting entity** concept defines the entity for which financial reports are prepared. Traditionally, financial reports are prepared for an economic entity, usually defined in legal terms as being a consolidated group in which one dominant entity controls of the group. With integrated financial reporting, the appropriate reporting entity for sustainability reporting may differ considerably from the reporting entity for financial reporting purposes. As two examples: First, recent publicity about retail companies that sell clothes made by child labor, and similar situations in other industries, indicate that transparent and informative reporting should include the entire supply chain in an entity's sustainability reporting. Second, as has been discussed recently, the environmental impact of a company's products is also a significant element to be considered in assessing a company's sustainability so the reporting entity for integrated reporting might consider customers or other users of a company's products. Traditional financial reporting is based on **monetary units** in which all non-monetary items are reported as an equivalent monetary amount. Almost all environmental and social information in reports to date are in narrative non-monetary terms. Under some notions of integrated reporting, environmental and social information would be incorporated into accounting measurements. Also as discussed above, Friedman (2009) and others imply a new accounting in which environmental risk, which included financial risk, is incorporated into product pricing. Under the costs attach principle of traditional financial accounting, costs are included in product prices and similar measurements if there is a payment (or similar actual use of resources owned); there has been no measurement method to incorporate use of "free" environmental resources nor potentially damaging environmental resources through emissions of such things as carbon dioxide and other greenhouse gases. Carbon trading schemes are in their earliest stages of development in Europe and some other places, but so far no accounting measurement has been proposed to include the cost of carbon emission purchases into products and similar accounting measurements. Figge and Hahn (2004) in their Advance project have developed the Advance Model (see also <http://advance-project.org>) in which, among other things, sustainable value added is computed in monetary terms for various types of emissions. These sustainable values, though, are not incorporated into accounting measurements, but could conceivably be reported in integrated

reports. Sustainable values as now computed are more suitable for management control and management accounting purposes.

Under the **time period** concept, traditional financial reporting is based on specific time periods, almost always one year, based on perceived users' needs for timely information covering discreet time periods of optimal length to make meaningful decisions. Two approaches have traditionally been used although with variations among countries: First the revenue-expense approach measures revenues earned during a year to derive a profit for the year; assets and liabilities are residuals. Second, the asset-liability approach measures assets and liabilities at the end and the beginning and of a year, subtracting the difference as profit for the year divided into revenues and expenses. The asset-liability approach has been adopted by IFRS and US GAAP, but the revenue-expense approach remains in some countries, notably Finland. The asset-liability approach is clearly more compatible with sustainability accounting as indicated in the introduction because it focuses on consumption of resources that would leave a company as sustainable at the beginning as at the end. Nonetheless, both approaches are problematic for integrated reporting because of the rigid notion of financial reporting that occurs in annual increments. Many issues of sustainability relate to long term consequences for the environment, for example from past environmental damage as in the oil fields of Nigeria and coal mining regions of the U.S, and damage from emissions over the life cycle of products like automobiles.

3.2. Auditing and other assurance

The panel discussion at the IAAER conference (November 2010) clearly contained a call for accounting researchers to be involved in additional roles in accounting for sustainability, notably auditing. Users of financial information, notably investors, it is claimed, need, almost demand, increasing levels of assurance on sustainability information, notably assurance of information in management commentaries and environmental reports. The anecdotal statements claim that investors require such assurance in order to make proper risk assessments of sustainability, especially because of documented false environmental statements presented in annual reports. In the Massey Coal case in the US, as part of a legal settlement, Massey agreed to provide audited statements of workplace safety and protections of the environment (Harris 2011). The call for more auditor assurance of environmental reports is also reflected in personal interviews with international accounting firms. Some countries, e.g. Sweden, allow auditors to offer both positive and negative assurance on environmental reports, i.e. positive assurance in which auditors examine evidence as in a financial audit and give a professional opinion about its reliability, and negative assurance in which the auditor states there is no reason to suspect the information is not reliable. Companies choose to provide environmental and social information, it is claimed, to obtain reputational benefits not necessarily related to risk. Assurance, if any, would be used to achieve greater reputational benefits; few companies are willing to pay for positive assurance because of limited perceived benefits. Calls for greater assurance of sustainability information, however defined, are based on anecdotes, assertion, conjecture, etc. It seems fairly certain, though, that interests of investors and creditors in assessing sustainability risk in making decisions have been largely ignored and are just now being realized. As a result there is a current need for accounting research to assess investors' and creditors' perceived needs for assured sustainability information, how they use it, market reaction to the information, etc.

3.3. Financial failures, Reporting and Auditing failures, and Enforcement

Yet another set of accounting-for-sustainability situations within the past few years are the well-known financial sustainability failures and near failures of companies like Enron, WorldCom, Parmalat, and Ahold and financial institution failures in due to sub-prime mortgages. These financial sustainability failures resulted not only in investor and creditor losses but also massive

losses for society and are clearly social and environmental sustainability issues as well. The sustainability failures were directly related to non-compliance with accounting standards, audit failures, and enforcement failures. In addition, the going concern concept implies financial sustainability and these organizations clearly were not going concerns. While there have been extensive research and publication about the high-profile cases, little research has been conducted in the context of accounting for sustainability. Research has shown, however, continued lack of compliance with accounting standards and apparent lack of enforcement, especially in Europe (e.g. Carrara et al. 2010; Fagerström et al. 2009, 2007a, 2007b). It is also recognized that lack of adequate enforcement of accounting standards within in the EU is contributing to lack of reliability of published accounting reports and thus the ability of users of financial reports to assess sustainability risks. As widely reported in the business media, in October 2010, the European Commission announced its intention to examine compliance with accounting standards, the role of auditors, and enforcement. It is too soon to assess the consequences of this action by the European Commission, but it is clearly an issue within accounting for sustainability.

4. Research Issues

With the analysis above of accounting for sustainability in the context of traditional accounting theory and practice, and recent events, this agenda now develops some specific research issues along with research methods and data sources.

4.1. A Research Framework for Accounting for Sustainability

A conceptual framework to guide researchers and practitioners in accounting for sustainability is an essential first step in this research agenda because of various notions of sustainability and the roles of accounting in accounting for sustainability that exist at the moment, and lack of a common language. Such frameworks have been successful in guiding emerging areas of accounting research in the past. In the 1970s, as the phenomena of multinational companies became sufficiently large to warrant ongoing accounting research, a seminal study, *An Accounting Research Framework for Multinational Enterprises* (Cunningham 1978) facilitated accounting research for multinational enterprises for coming decades. A similar but less elaborate framework also facilitated research into accounting research for performance reporting and accountability in governmental entities (Cunningham and Harris 2005) when this issue emerged as an issue for accounting research. Such a framework in accounting for sustainability would, among other things, identify, explore, and analyze systematically:

- Various notions of sustainability to assess which ones represent roles for accounting, and to what extent.
- Groups and individuals who have or potentially could have an involvement in accounting for sustainability, including Assistant Lecturers of reports; users of such information, e.g. banks and investment analysts; assurers of such information, i.e. auditors or similar groups; regulators; other organizations, e.g. the United Nations and its PRI academic network, who have taken a direct interest and action in the issue; and policy makers such as the European Commission.
- Different forms and levels of accountability, e.g. financial reporting and assurance thereof; integrated reporting of financial and other sustainability accounting information; reporting sustainability information outside the financial reports and assurance thereof; incorporating sustainability risk and use of resources in accounting measurements; other elements of accountability for sustainability risks; managerial accounting; management control systems; etc.
- Identifying and describing various notions of a sustainable entity that would be the object of accountability.

-Matching the interests of groups and individuals with regard to sustainability with different forms and levels of accountability.

-Developing a common language to discuss and guide future research.

Similar to *An Accounting Research Framework for Multinational Enterprises* (Cunningham 1978, pg. 1), this research framework seeks to facilitate continuing research in accounting for sustainability by describing in detail gaps in current knowledge, specific issues that require research, factors that should be considered when conducting the research, and suggesting research approaches. One important aspect is to identify failures in past research and means to overcome the failures. It also provides a common taxonomy and language for continuing research. Following Cunningham (1976, pp. 31-61) and sources cited by him, this part of the research agenda uses a general systems theory approach as the primary methodological and analytical tool (described in more detail shortly). General systems theory is especially well suited to develop conceptual frameworks in business contexts and especially for accounting research because it allows researchers to explore such relevant aspects as:

-The scope of the agenda and which systems are included in this scope.

-System boundaries, i.e. what is included in a system and what remains outside in the environment. **It is important to note (as discussed below) that the word “environment” has a different meaning than is commonly used in the literature on accounting for sustainability so far.** For this framework, boundary considerations are important for such issues as defining sustainability in accounting contexts; what is inside systems of accounting for sustainability, and what remains outside in the environment; and whether sustainability reporting and financial reporting are separate systems or can become integrated into a single reporting system.

-System regulation and control. For this framework, regulation and control factors deal not only with such obvious issues as standards and enforcement, but also what type of outputs from accounting for sustainability are to be produced and for whom.

4.1.1. Methodology

This part of the research agenda uses the general systems methodology discussed in Cunningham (1978 Chapter two). General systems theory is not a theory per se but instead an approach to guide analysis and development of more specific research approaches. It is also a first step in grounded theory approaches which represent back and forth analyses of a system and its environment to build a theory.

-Under general systems theory, each system is viewed as part of a larger system and each system can be viewed as having one or more subsystems. The issue is to identify the system of interest for the research issue at hand, and the boundaries of that system. Thus, the system of interest can be defined in different ways for different research purposes. As discussed above, from a sustainability perspective, the system of interest can include a company and its supply chain as well as users of its products during the product life cycle. In defining the boundary of the system of interest, everything that remains outside the boundary is considered to be the environment. **As noted above, this definition of “environment” is different from the term “environment” used in the research literature to date which typically views environment as representing ecological resources.** Among other things, the analysis considers properties of the system of interest, properties of subsystems, and properties of the environment, including influences of each on the other.

Other important aspects of general systems theory are the notions of regulation and control. Control is generally defined as setting expectations, monitoring outcomes against those expectations, and taking actions if necessary to make necessary changes to achieve desired outcomes. Thus control typically occurs outside a system in the environment, depending on how the boundary between a system and its environment is defined. Regulation represents activities

and subsystems designed within a system to achieve the desired outcomes somewhat automatically without explicit intervention. Notions of what constitutes regulation and control differ depending on how the system of interest and the environment is defined. The concepts of regulation and control have obvious implications for accounting for sustainability. One example is establishing standards for sustainability reporting, a control function, and the steps taken by an entity to assure compliance with standards.

4.2. Reporting Sustainability Information

In some countries, e.g. Sweden, a form of integrated reporting is required for certain companies, e.g. those with state ownership, following the triple bottom line of the Global Reporting Initiative (GRI) (www.globalreporting.org/Home). In addition, several other companies have been voluntarily reporting environmental and social information for some years. Recent attention to so-called integrated reporting has come from the Accounting for Sustainability Project (www.accountingforsustainability.org). This project includes initiatives of the International Integrated Reporting Committee (IIRC) (<http://www.integratedreporting.org/>) to develop a new reporting model that will better reflect the interconnected impact of financial, environmental, social and governance factors. The IIRC includes, among others, representatives from the major international accounting firms, securities exchanges, the Financial Accounting Standards Board (FASB) of the US, and the International Accounting Standards Board (IASB). As mentioned above, though, there is, however, no common notion of what constitutes integrated reporting.

Also as mentioned above, anecdotally, companies report such so-called sustainability information and sometimes seek assurance of such to achieve reputational benefits. Research is needed to identify what type of reputational benefits companies expect to achieve. A further issue is establishing standards for sustainability reporting. The Global Reporting Initiative (GRI) (www.globalreporting.org/Home), a network-based organization based in the Netherlands, provides standards for voluntary reporting of supplemental sustainability disclosures. GRI reporting standards are required in Sweden for the companies that are required to report the so-called triple bottom line. The IIRC as part of the UN PRI is also establishing reporting standards. Research could be useful to determine the criteria by which companies, accounting firms and others choose reporting standards.

4.2.1. Research Methods

The primary research methods for this set of issues would be content analysis and field studies. With respect to content analysis, because of different notions of what represents integrated reporting, it would be useful to examine actual reports under the different approaches to learn differences and their impacts. Content analysis might also be used to examine reports of different companies that use different types of reporting standards to assess different impacts. A further analysis of the groups promulgating the standards to determine their intentions and desired results can be useful. Such content analyses can be complimented by field studies of the companies that currently report sustainability information to determine the difficulty or ease of implementation and extent of compliance. Field studies represent a form of grounded theory in which researchers engage with the field to discover phenomena of interest to be used to develop a theory. Field studies by Fagerström et al. (2009, 2007a, 2007b) have examined similar issues in implementation and compliance with reporting standards and provide a model for this research agenda. Field studies can be useful to assess the reputational benefits companies attempt to achieve from reporting environmental and social information. Field study research by Cunningham and Harris (2005) on a similar topic about performance reporting of governmental entities was a significant contribution to accountability research for such entities and can also be used as a model in this research.

4.3. Users of Sustainability Information.

As mentioned in the background, research and discussion in accounting for sustainability so far have almost exclusively focused on companies that prepare and present sustainability information. There is very recent recognition that the needs of users of the information must be considered as well. The research framework for accounting for sustainability as described in 4.1 would necessarily address some of these issues. Research is also needed to address directly users' perceived needs and reactions to them. Anecdotal evidence suggests that financial analysts, one major user group, routinely discard supplemental environmental disclosures. Instead, anecdotally, analysts want information that allows assessment of risk. Somewhat contradictory prior research has shown that financial analysts, do consider sustainability risk information when making recommendations to their clients (H. Nilsson, et al. 2008). Other research reported by the SIRP (www.sirp.se) indicates a market reaction to sustainability risk under certain situations thus suggesting that some users of sustainability information do use such information. Research is needed not only to assess whether sustainability risk information is desired and used, but the form in which sustainability risk incorporated in accounting reports, e.g. in integrated reports, in product prices according to as suggested by Friedman (2009), and in other accounting measurements.

4.3.1. Research methods

Field study research methods similar to those discussed above (Fagerström et al. 2009, 2007a, 2007b) are useful to learn more about potential users of integrated reports, what they expect, different formats they prefer, and similar items. The primary research method for this issue could be experimental research along the lines used by Baker and Cunningham (1993) when assessing the perceptions of bankers about different sets of assurance standards on their loan decisions is a model for this analysis. With respect to experiments, persons in each treatment group would be *a priori* viewed as essentially identical and making the same types of decisions following the approach of Cunningham and Baker (1992). In their study, subjects of experiments were attending training and education classes sponsored by a professional bankers' association; the association supported the type of research and virtually all participants voluntarily chose to participate. The subjects for this and similar issues in this research agenda could be similar, not necessarily in educational classes, but groups of professionals who use reports of sustainability information. In addition, or alternatively, students could be used as surrogates for users of sustainability accounting information. Numerous accounting-related experiments using students as surrogates have been conducted and published by Michael Shields and Graeme Harrison, among others; these studies are too numerous to cite here, but can be readily located and examined. Similarly, experimental studies in sustainability under the auspices of the SIRP (www.sirp.se) have used students as surrogates for professionals who use sustainability information. These studies cite evidence that students perform as well as actual subjects in these types of experiments.

4.4. Auditing and Other Assurance of Sustainability Information

As mentioned in the introduction, background, and discussions above, a major emerging issue is the extent to which users of sustainability information expect assurance; at what level, negative or positive; and in what form, supplemental or incorporated in financial measurements. A further issue within this agenda issue is establishing both standards for sustainability reporting and standards against which assurance is given. As mentioned above, the Global Reporting Initiative (GRI), a network-based organization based in the Netherlands, provides standards for voluntary reporting of supplemental sustainability disclosures. The IIRC as part of the UN PRI is also

establishing reporting standards. For assurance, as one example, major accounting firms in Sweden use assurance standards published by Föreningen Auktoriserade Revisorer (FAR) (www.far.se) in FAR RevR6 (http://www.far.se/pls/portal/docs/PAGE/FAR_2010/FAR_TYCKER/INFORMATIONSMATERIAL/GRANSKNINGAVHALLBARHETSREDOVISNING.PDF), although use of such standards is apparently voluntary. FAR RevR6 is taken from (essentially a translation of) the International Standard on Assurance Engagements 3000 (ISAE 3000) (http://www.accountability21.net/uploadedFiles/Issues/ISAE_3000.pdf) developed in the Netherlands. A competing set of assurance standards, though, has been developed by AccountAbility (<http://www.accountability.org/>) in its AA1000 AS. Despite the organization's claim of wide-spread acceptance, there is no indication that such standards are used in Nordic countries. Yet another set of standards is incorporated in the Greenhouse Gas Protocol Initiative (<http://www.ghgprotocol.org/>).

These sets of assurance standards, while not always in direct competition because they relate to different types of sustainability information, overlap sufficiently to create uncertainty and complexity in accountants' roles of providing assurance. Because of multiple sets of standards for both reporting and assurance, yet another set of issues to be addressed in this research agenda is the criteria by which companies and organizations providing assurance voluntarily choose standards to use in reporting and in assurance engagements. When sustainability information is included in accounting measurements, e.g. pricing products to include external resource costs and including sustainability risk in financial products, additional issues of reporting standards and assurance standards are presented. Similar issues are presented in integrated reporting when environmental and social concerns would be included in accounting measurements. Current accounting standards in almost every country, including Nordic countries, do not permit such accounting measurements; likewise auditing standards for such measurements are not available.

4.4.1. Research Methods

The previous research by Baker and Cunningham (1993) discussed above, is an ideal model for the type of research on assurance levels in this research agenda. In that experiment, bank loan officers were asked to make decisions based on financial statements prepared using, among other things, different levels of audit assurance and different accounting standards. Field studies like Fagerström et al. (2009, 2007a, 2007b) and Cunningham and Harris (2005) are a grounded theory approach useful models to examine auditors' perceptions of different levels of assurance and standards.

4.5. Financial Distress, Non-compliance with Financial Reporting Standards, and Lack of Enforcement

Despite the fact that past financial failures, notably Enron and sub-prime mortgage crises, have resulted in massive social costs, there is only recent recognition that financial distress, often related to failure to consider different types of sustainability risk, non-compliance with financial reporting standards, and enforcement of accounting standards, is an issue of accounting for sustainability. As discussed in the introduction and background, though, Friedman (2009) views ecological risk and financial distress to be integrally related through inadequate accounting for risks. Even though financial and other sustainability risks are recently receiving attention, the going concern concept has been an essential concept in financial reporting and auditing for many years. Research would be useful to assess the extent to which users of financial information, notably banks, investment analysts, and financial analysts, view the link between financial distress risk and ecological risk as being integrally related as does Friedman (2009).

Non-compliance with financial reporting standards has been an accounting research topic for at least the last 10 years in which wide-spread non-compliance was discovered, and by implication apparent lack of enforcement (e.g. Carrara, et al. 2010, Fagerström et al. 2009, 2007a, 2007b; and sources cited by them). Such research, though, focused on detecting non-compliance without implications for sustainability. As indicated in these studies, non-compliance with accounting standards and lack of enforcement are readily apparent and should be apparent to users of financial reports. Research could assess the impact on apparent non-compliance with accounting standards on users of the information, notably bankers and bank investment analysts.

A very recent study by the publishers of the Asset 4 data base has indicated that companies that report sustainable information also have abnormal returns, suggesting that investors and/or analysts do not consider sustainability information in their decisions. By implication, failure to consider sustainability risk could lead to abnormally low returns or loss through financial failure. Research is useful to assess any relation of negative or lack of reported sustainability information on low returns or failure.

4.5.1. Research Methods

This line of research could follow an approach by Baboukardos (2011, 2010). The research would involve content analysis of publicly listed European companies to identify lack of compliance. Examination of stock market reaction to the lack of compliance and other faulty financial information could then use the well-known value relevance model and other well known models that assess market reactions to accounting information. Among others outputs, the well known measurement of Tobin's Q gives an indicator of risk. Similar research methods can be used to assess the value relevance of negative sustainability information. In addition, the well known bankruptcy prediction models can be used to assess the ability of negative sustainability information to signal financial failure. The existence of the Asset 4 data base now facilitates research methods using large samples and more sophisticated quantitative methods.

5.0. Concluding discussion

This purpose of this paper has been to give structure to the diverse, disjointed area of research into accounting for sustainability, providing background, including identifying research issues, and possible research methods. In introduction and background discussions, it was apparent that the focus to date on reporting environmental, i.e. ecological, and sometimes social and governance information is narrow and inadequate. Instead, new additional research areas are emerging and some traditional research areas are taking on new perspectives. These include:

- A call for integrated reporting that integrates environmental (ecological), social, and governance information along with financial reports. Differing notions of what represents integration exist, however.
- Interests of users of sustainability information, including integrated reports, must be considered.
- Calls for expanded roles of auditors and other assurers.
- Expanding research issues of financial failures, accounting and auditing failures, and lack of enforcement to recognize an essential sustainability component.

After presenting background, the paper analyzes the emerging issues against traditional accounting concepts, notably the postulates of going concern, entity, monetary unit and time period, the paper identified many research issues that need to be resolved. These were presented in five sets of research issues for accounting for sustainability

In the process, the paper presented background material and then identified five sets of research issues in accounting for sustainability along with methods and data sources for each:

- An accounting research framework for sustainability to be based on similar frameworks for other emerging accounting research issues using general systems theory approaches. This framework identifies systems of interest and the environment and necessarily challenges the traditional notions of reporting entity and time period, among others.
- Reporting of sustainability information which has been the focus of most research to date, and the emerging important topic of integrated reporting. The analysis challenges entity, monetary unit, and time period concepts as well as addresses which standards are to be used and how to incorporate environmental and social issues into accounting measurements.
- Users of sustainable information, their uses and perceived needs. This is an area that has been largely neglected in research to date. Research using field studies and experiments is needed to assess users' needs and expectations.
- Auditing and assurance issues that are taking on greater importance as more users demand assurance for the sustainability information. Issues of which standards to be used can be explored and experiments would be used to assess users' expectations and how they react to different types and levels of assurance.
- Financial distress and sustainability consequences of accounting and enforcement failures that are just now being recognized as sustainability issues. Research using traditional market methods, notably the value relevance model and bankruptcy prediction models

This agenda while ambitious gives definite structure and clearly indicates a substantial change in traditional view of accounting, reporting, and auditing in a new era of sustainability.

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A LONGITUDINAL ANALYSIS REGARDING THE EVOLUTION OF PROFIT TAX REGULATIONS IN ROMANIA – AN EMPIRICAL VIEW

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The study conducted a longitudinal analysis regarding Romanian profit tax regulations. Beginning with the first profit tax regulation implemented in 1991 and until now, we analyzed based on a empirical approach all changes that have occurred over time in the Romanian accounting environment. The motivation of the study conducted was based on the strong relationship between accounting and taxation in the Romanian accounting environment over time, the profit tax being one of the main items of this relation. This particular study is divided into five sections. After a short introduction and presenting the motivation of the study (section 1), in section 2 we conducted the literature review based on international and national studies regarding the profit tax regulations through the relationship between accounting and taxation. Section 3 presents a brief review of the main Romanian regulations that concerned the profit tax and the most important changes that have occurred over time. In section 4 we conducted the empirical analysis. In this section is realized a series of analysis, aiming the following: (1) the total number of regulations that have amend the main regulations presented in the previous section; (2) the type of amendments implemented over regulations (abolishment, text amendment, adding new articles or alignments); (3) the total number of amendments approved by law without modifications, respectively the total number of amendments approved on the Official Journal through Government Ordinance or Emergency Ordinance and unapproved by law. The empirical analysis conducted documented that the main shortcoming associated with the profit tax regulation is due by the multiple changes which have been subject of the 5 main profit tax regulations. The last section (section 5) consists in presenting the conclusions of the study. As main conclusion, the profit tax regulation is stable only in terms of the small number of main regulations, the large number of amendments creating difficulties in the understanding and application by practitioners.

Keywords: profit tax regulations, longitudinal analysis, Romania

JEL Classification: H25, H29, M40, M41

1. Introduction

The relationship between accounting and taxation is a much disputed subject in the literature and in practice. In the literature, the central point of this relationship is represented by the profit tax, in the next section being realized a brief overview of this aspect.

To may conduct a study regarding the relationship between accounting and taxation is important to know and understand the tax regulation and also the accounting regulation, and in particular the profit tax regulation.

The present study aims to be a starting point for further research regarding the relationship between accounting and taxation in Romania. In this respect, the study conducted a longitudinal analysis regarding the evolution of Romanian profit tax regulation, being conducted an empirical analysis regarding the amendments which have occurred over time. For this reason, a series of analysis was conducted for capture the evolution of the multiple amendments of profit tax regulations.

Section 2 is dedicated to the international and national literature review. This section captures that studies which were conducted in the literature in terms of relationship between accounting and taxation the central point being represented by profit tax. Section 3 presents a brief overview of the Romanian profit tax regulation and their main changes over time. In section 4 is conducted the empirical analysis in order to realize the main objective of the study: *the longitudinal analysis regarding the evolution of Romanian profit tax regulations*. Section 5 concludes the study.

2. Literature review

No study was conducted until now regarding the longitudinal analysis of profit tax regulations. As we mentioned above, the profit tax is one of the main item of the relationship between accounting and taxation. Thus, in the next paragraphs of this section we will analyze such paper which has captured this aspect based on international and national studies.

Hoogendoorn (1996) conducted a study which realized an overview of 13 EU Countries regarding the relationship between accounting and taxation, based on the distinction between those 2 Accounting Systems (Anglo-Saxon and Continental accounting systems), as well as, the connection and disconnection between accounting and taxation regarding deferred tax as part of profit tax. The conclusion of the study was that there are significant differences between countries from this point of view.

Lamb *et al.* (1998) identified 5 possible cases of the relationship between accounting and taxation. These cases were tested on 4 countries (Germany, France, UK and US), using 13 factors which had a different behavior depending by the type of accounting system of each country. These factors (such as: depreciation, adjustments, fixed assets recognition and evaluation, etc.) have different behavior in the determination of the tax base for profit tax. Based on this study, Nobes *et al.* (2004) realized a comparison between Spain and countries included in the study conducted by Lamb *et al.* (1998). Nobes and Schwencke (2006) conducted the same analysis on Norway case and Gee *et al.* (2010) conducted a comparative analysis between Germany and UK. In Romania, Fekete *et al.* (2009) and Cuzdriorean *et al.* (2010) have been realized an empirical analysis of the relationship between accounting and taxation. In their analysis they included the profit tax as tax factor that influence the turnover as accounting factor. Based on those studies, Fekete *et al.* (2010) tested the empirical model on SMEs cases using the same items (profit tax and turnover). These papers found a relationship between profit tax and turnover, but the model show that a lot of other factors influence the accounting. In this respect, we conclude that it would be necessary if we would find the individual factors which influence the tax base of profit tax (based on study conducted by Lamb *et al.* (1998), plus other specific factors for Romanian environment). Thus, as we mention in the previous section, this paper may be a step of other research regarding the relationship between accounting and taxation, as well as for the measuring the influence of taxation over accounting or accounting over taxation.

3. Brief review of the profit tax regulations in Romania

The starting point for the term of profit and also for profit tax in Romania was year 1990. Through The Government Decision no. 741/1990 was introduced the term of *tax benefit*. Thus, for the first time in Romania, after the communism era, based on article no. 2 from the present Decision:

“The tax benefit is due by economic entities, and also by centrals, big entities, trusts, small companies and other assimilated entities ...”

The same Decision, affirm that:

“The entities provided on article no. 2 from the present Decision not perform payments from their benefits to the State budget” (article no. 3)

The term of *tax benefit* was changed through the Law no. 12/1991, when appear for the first time the term *profit tax*. From 1991 until now, the main profit tax regulation was amended by other 3 times (**Figure 1**). These regulations were also amended by a lot of other regulations, the empirical analysis of this situation being realized in the next section.

Figure 1. The main profit tax regulations in Romania

Regulation	Government Decision No. 704/1991	Law no. 12/1991	Government Ordinance no. 70/1994	Law no. 414/2002	Law no. 571/2003
Period	1990	1991-1994	1995-2002	2002-2003	2004-present

Source: Authors projection

From 1991, the year of appearance of profit tax regulation, a lot of amendments have been produced over the regulations. **Table 1** illustrates a brief overview of the main important amendments that were produced over time.

Table 1. Evolution of the main profit tax regulations in Romania

Period	Tax Regulation	Effective date	Main changes introduced
1991-1994	Law No. 12 / 30.01.1991 on the profit tax	January 1, 1991	Progressive tax was applied, with a total of 67 tax cuts Tax cuts were between 2.5% and 77%, with a profit of 25,000 lei, relieved from duty Taxable profit was calculated as the difference between revenue received and expenditure provided by law
	Government Decision No. 804 / 30.11.1991 on the profit tax	January 1, 1992	Progressive rates were reduced to two rates, as follows: 30% for a taxable profit under 1 million lei 45% for a taxable profit over 1 million lei
1995-2002	Government Ordinance No. 70 / 29.08.1994 on the profit tax	January 1, 1995	Profit tax rate was set at 38% Differential tax rates were applied for certain categories of taxable persons A distinction between small and large taxpayers is made; the tax base was established depending on the category of taxpayer Concepts of tax-free income and non-deductible expenses are introduced; unclear setting conditions were established for tax-free revenue For certain expenses partial deduction was applied (e.g. for gifts and subsidies granted were established tax-deductible limit set by law)
	Government Ordinance No.	January 1,	Elimination of the distinction between small and

	70 / 29.08.1994 on the profit tax, republished	1997	large taxpayers Elimination of the distinction between accounting depreciation and tax depreciation
	Government Emergency Ordinance No. 217 /29.12.1999	January 1, 2000	Profit tax rate was set at 25% Explanations were provided for the total deduction or partial deduction of expenditure included in the calculation of taxable income. The concept of taxable income is reintroduced; it may occur for property revaluation
2002-2003	Law No. 414 / 26.06.2002 on the profit tax, 1994 ⁽²⁾	July 1, 2002	Taxable profit = total revenue - total expenses – tax-free revenue + non-deductible expenses The categories of free-tax revenue were defined
2004 - present	Law No. 571 / 22.12.2003 on the Fiscal Code	January 1, 2004	Taxes and fees due to the state budget and local budgets are regulated, income taxes being regulated under Chapter II of this Law The categories of free-tax revenue, deductible expenses, partially deductible expenses, and fully non-deductible expenses are distinctly regulated Distinction between accounting depreciation and tax depreciation The amount of reserves that can be deducted in the determination of taxable income and tax deductible provisions is distinctly regulated The determination of the deductibility of interest expenses and the foreign exchange losses is distinctly regulated Tax credit concept is introduced; the most common tax credit is represented by the deduction of the gifts and subsidies expense from profit tax, granted in the amount according to law
	Government Emergency Ordinance No. 138 /29.12.2004	January 1, 2005	Profit tax rate was set at 16%
	Government Emergency Ordinance No. 34 / 11.04.2009	May 1, 2009	Introduction of the minimum tax which is applied on companies revenues obtained in the previous year, whether or not they obtain profit The deductibility of expenses for certain sectors, such as fuel expenditure, value added tax related to the purchase of cars, was eliminated The tax measures apply until 31.12.2010

Source: Authors projections based on Fekete *et al.* (2010)

4. Empirical analysis regarding the amendments of the profit tax regulations

The methodology that we used in the empirical analysis is based on the longitudinal view regarding the total number of amendments which were produced over time in terms of profit tax regulations.

The information's regarding the profit tax regulations were obtained from the Official Journal of Romania (www.moficial.ro), and from the official site of the Chamber of Deputies, (www.cdep.ro).

In this respect, to obtain the answer to this problem, we conducted an analysis that consisted in the counting of the regulations that have amended the main profit tax regulations. The answer of the main problem of our research, was obtain based on the following research questions:

Q1: Which is the total number of regulations that have amended the main profit tax regulations?

Table 2. The number of regulations which amended or proposed amendments of the main profit tax regulations

	Total, that comprised	Government regulations approved by law without amendments	Government regulations approved by law with amendments	Laws which amended the Government regulations	Regulations that have a direct amendment*	Government regulations rejected by law	Government regulations which are not yet adopted
Law no. 12/1991	5	0	0	0	5	0	0
Government Ordinance no. 70/1994	5	3	0	0	2	0	0
Government Ordinance no. 70/1994, republished	23	7	4	4	4	4	0
Law no. 414/2002	3	1	1	1	0	0	0
Law no. 571/2003	21	10	4	4	2	0	1
TOTAL	57	21	9	9	13	4	1

Source: Authors projections

Table 2 shows that a total number of 57 regulations amended or proposed amendments of the main profit tax regulations. The highest percentages are represented by the Government regulations (Government Ordinance or Emergency Ordinance) (21 regulations), respectively 13 regulations that have a direct amendment (* there are included those regulations which did not approve the amendments made by other regulations). There is also, an approval amendment of Law no. 571/2003 (Emergency Ordinance no. 117/2010) which is not net adopted.

Q2: Which is the type of amendments implemented over regulations (abolishment, text amendment, adding new articles or alignments)?

Table 3 illustrates that a number of 168 proposals of amendments were made over the 3 main regulations (over Law no.12/1991 no amendment proposal was made). A percentage of 50% (84 of 168 proposals) of the total proposals represents the articles amendments (change the existing text articles of the main regulations). The gray part of **Table 4** illustrates that a total number of 43 amendments approve without proposals (Regulations that have a direct amendment); in this case, 70% of amendments are represented by articles amendments (30 of 43 amendments).

Table 3. The total proposal of amendments

Profit tax regulation	Total proposal of amendments, that comprised	Articles amendments	Abolishment	Completion
Law no. 12/1991	0	0	0	0
Government Ordinance (GO) no. 70/1994	2	2	0	0
Government Ordinance (GO) no. 70/1994, republished (r)	53	13	14	10
Law no. 414/2002	8	6	0	2
Law no. 571/2003	105	63	16	26
TOTAL	168	84	30	38

Source: Authors projection

Q3: Which is the total number of amendments approved by law without modifications, respectively the total number of amendments approved on the Official Journal through Government Ordinance or Emergency Ordinance and unapproved by law?

The answer of this question is received from data collected in **Table 2**. Thus, a total number of 21 Government regulations approved by law without amendments which amended a total number of 133 through proposals, which represent 61,29% from the total proposals (based on **Table 4**). **Table 4** contains also the amendments to the proposals (23 amendments) and the completion to the proposals (10 regulations completion, 5 regulations amendments and 3 repelling (abolish). These were made by 9 Government regulations approved by law with amendments, plus 9 Laws which amended the Government regulations.

Table 4. The total approvals amended by regulations

	Total approvals, that comprised	Amendments approves through proposals	Amendments to the proposals	Completions to the proposals			Amendments approve without proposals, that comprised	<i>Articles amendments</i>	<i>Abolishment</i>	<i>Completion</i>
				Regulations completion	Regulations amendments	Abolishment				
Law no. 12/1991	10	0	0	0	0	0	10	9	1	0
GO no. 70/1994	8	2	0	0	0	0	6	3	0	3
GO no. 70/1994, r	56	31	15	3	1	0	6	5	1	0
Law no. 414/2002	9	4	4	1	0	0	0	0	0	0
Law no. 571/2003	134	96	4	6	4	3	21	13	2	6
TOTAL	217	133	23	10	5	3	43	30	4	9

Source: Authors projection

5. Conclusions

As a result of the analysis conducted, we can conclude that the profit tax regulation is stable only in terms of the small number of main regulations (5 regulations over time), the large number of amendments creating difficulties in the understanding and application by practitioners. During the 20 years of the analysis, a total number of 217 approvals were amended the profit tax regulations, which were made by 57 regulations (56 which were adopted, and 1 which were not yet adopted). As a weight of the amendments, around 11 amendments were approved each year, this showing that the profit tax regulations are dominated by instability.

As further research, we will analysis the types of the amendments, based on 3 directions: (1) the direct influence analysis (amendments with effect over all type of taxpayers) and indirect influence; (2) the text analysis of amendments, in this respect being conducted other statistical analysis, based on the social impact produces by regulations (e.g. the effects of crisis in terms of regulations); (3) the type of amendments (e.g. the tax base, the tax rate, etc.).

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ENHANCING ASSETS' PROTECTION THROUGH AN ADEQUATE MONITORING OF INTERNAL CONTROL SYSTEM BY INTERNAL AUDIT

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The assets are established into a company as very important and strategic resources that are contributing at the creation of the needed premises to conduct the daily-basis activity and also to reach present and future planned objectives. Recent studies like COSO's Fraudulent Financial Reporting 1998-2007 have highlighted an increasing fraudulent activity against assets therefore the efforts of fighting against fraud must be supplemented in order to preserve the existence and value of those resources. Internal controls are processes implemented in order to give a reasonable assurance that the company will not become a fraud victim. Even so, a lot of internal controls are paying a heavy tribute to their lack of efficiency and update. Thus, for a correct functioning, internal controls must be monitored and assessed permanently in order to preserve their strength and ability to fulfill their mission. This approach will deliver more added value because rather than being corrected after they have already occurred, the frauds related with the assets will be prevented, detected and reported at a timely moment, thereby the incidence and value of those criminal activities will decrease significantly. Furthermore, because not only the process of monitoring is important but even the entity conducting this activity we believe that internal audit is the most appropriate to undertake this responsibility. Thus, through this material we opened a discussion about how important permanent monitored and updated internal controls are in order to assure a proper assets protection and why internal audit, rather than the management, should be the most eligible to undertake this responsibility. Also we provided some suggestions regarding the main activities that must be taken into consideration by an internal audit professional when is being involved in a monitoring process of internal control system. We do believe that this paper will be the starting point for new discussions about the future activities and resources that must be invested in order to assure that internal audit's independence, objectiveness and professionalism will deliver a proper degree of security against frauds.

Keywords: internal audit, monitoring, internal control, assets, fraud

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Introduction

Because of the current difficult economic circumstances caused by the global recession, the assets are becoming scarce considering the fact that sometimes are more expensive to purchase and much difficult to be obtained and/or replaced. Unfortunately, preserving the value and the existence of the assets often involves fighting against fraud or conducting activities to prevent fraud from occurring. Those activities are neither cheap nor a downhill job, on contrary sometimes undertaking such a responsibility might look like as a preparation for a Sisif's work. Therefore a well-balanced management and an efficient control of the assets is imperative to assure the capability of the company to operate not only in near but also in the remote future. In order to fulfill its mission, internal audit will have to develop new and efficient ways to fight effectively against fraud and preserve the value and existence of company's assets. One starting point could be the assessment and monitoring of internal control system, an activity meant to give assurance that internal controls are in place and are not deteriorated.

Previous Studies in the literature

The internal control system is necessary to provide a reasonable assurance regarding the company's capacity to achieve its objectives. Nevertheless, a function more independent and objective must be implemented in order to provide a satisfactory level of safety and surveillance of the already existing control system. Thus internal audit adds value through improving the control and monitoring environment within organizations to detect fraud (Coram, Ferguson and Moroney 2006: 2).

Because of its key role in corporate governance new challenges are arising related with the potential of internal audit to assure an adequate assets protection and to detect, prevent and deter fraud in comparison with the solution provided by the outsourcing of this activity.

Some scholars found out that financial statements users do not perceive a difference between internal audit insourcing and outsourcing (Lowe, Geiger and Pany 2001: 4) while others stated that companies that outsource believe that an external provider is technically more competent (Carey, Subramanian and Ching 2006: 5). Even so, it is recommended not to exclude totally the internal audit function in the benefit of outsourcing. A good advice is to strengthen the internal audit or to use a partial insourced audit because there is a significant positive relation between an organization having an internal audit function and the number of value of self-reported frauds. For those organizations with internal audit, partial or full insourcing increased the likelihood of fraud detection when compared with organizations that outsource the entire function (Coram, Ferguson, Moroney 2006: 3).

It is obvious that internal audit is imperative to assure that the company will operate properly but in the same time the quality of internal audit and its ability to reach its objectives are close related with the quality of internal control system. Thereby, the viability of internal control system must be assessed, tested and monitored permanently in order to identify and change the obsolete components with new and genuine internal control procedures that are delivering the expected results.

Methodology

Through this paper we intend to propose a discussion on the theme of how important the activity of monitoring the internal control system through internal audit is in order to assure a proper assets' protection. First we will circumscribe the relation between internal control and internal audit and also explain why, in our opinion, internal audit should be the first choice to be considered when deciding whom is going to monitor the internal control system. Furthermore we will provide an insight regarding the nature and evolution of the main fraud techniques used against assets in accordance with the information from COSO's 1987-1997 and 1998-2007 Fraudulent Financial Reporting. Nevertheless, based on the suggestions from COSO's Guidance on Monitoring Internal Control Systems issued in 2009 and our previous research, we will provide some ideas regarding the main activities that should be considered by an internal auditor when deciding to monitor the internal control system within a company.

The role, importance and the relation between internal control and internal audit

The vast majority of the companies have already implemented internal control systems and still cases of misappropriation of the assets are discovered each year. Therefore, a question arise if the internal controls are indeed effective activities providing a reasonable assurance regarding companies' potential to reach their objectives or if companies can get "clean" attestations on their internal controls without in fact having effective control structures, much the same way companies like Kimm or WorldCom could get "clean" opinions on financial statements that turned out to have glaring errors (Locatelli 2004: 13).

During the years, internal control has gradually evolved from traditional meaning of an activity of verifying and inspecting a certain objective to a modern sense of: to master, to govern, to lead (Lenghel, Popa, Oprean: 11). Therefore for all members of a company is very important to have guidelines in order to understand the importance and the way an efficient internal control system should be accomplished. Thus organizations like COSO (The Committee of Sponsoring Organizations of the Treadway Commission) play a very important role in providing to executive management and governance entities on critical aspects of organizational governance, business ethics, internal control, enterprise risk management, fraud, and financial reporting.

According with COSO, internal control is a process effected by an organization's structure, work and authority flows, people and management information systems, designed to help the organization accomplish specific goals or objectives. Thus, internal control should yield the premises to optimize the allocation and usage of resources through an efficient management, to assure the assets' security, to survey the way the laws and regulations are being respected, to supervise the implementation of an accounting system in agreement with regulation, to prevent and identify frauds and nevertheless to produce, organize and provide relevant and useful information at timely moment.

COSO's internal controls pattern is build considering 5 components: control environment, risk assessment, control activities, information and communication and monitoring.

Even if is the last one listed, monitoring is essential in order to design and implement a genuine internal control system able to satisfy the existing requirements. Truth is that unmonitored internal controls tend to become anachronistic over time because are not updated, revised and implicitly connected to the existing circumstances and activities conducted within the company. An appropriate monitoring will enhance the chances to identify and correct internal control deficiencies on a timely basis, addressing them in a proactive, rather than reactive manner and also it will produce more accurate and reliable information.

Internal controls are critical but their performance and quality must be monitored and assessed by an entity more independent and objective. As a natural consequence, internal audit, a superior level of examination and surveillance must be developed. According to the definition provided by IIA (The Institute of Internal Auditors) internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes. From the definition issued by IIA it is obvious that internal audit is close related with internal control and in one stage internal control becomes the object of an internal audit.

Nevertheless, internal audit depends of the quality and the way internal controls are being respected and conducted in the company because when it comes to start an internal audit, the auditor has 2 main choices: either to test and verify directly a large amount of transactions and operations, which could be very costly and time consuming, or to assess the potential of internal control system and according to that to decrease the work volume. If this is the case, internal auditing can rely on the controls to reduce the amount of direct testing it would otherwise be required to perform (Locatelli 2004: 14). In addition, because of the increasing size of the operations of a business it became increasingly difficult for auditors to efficiently rely only on direct and substantive testing. As a result, understanding and defying internal controls look on increasingly greater importance (Locatelli 2004: 14).

Therefore internal audit must be directly involved in the activity of assessing and monitoring internal controls because an efficient internal control system has a positive impact on internal audit's work.

The number and nature of frauds related with assets

The cases of frauds related with assets have increased, according to COSO's Fraudulent Financial Reporting, from the period of 1987-1997 to 1998-2007. Thereby, from 1987 to 1997 the overstatement of the assets (excluding accounts receivable overstatements due to revenue fraud) was noticed in half of the 204 sample companies. At the same chapter, at the end of 2007 an increase was recorded, with 51% of the 347 selected companies. Also, a growth was identified considering only the overstating of existing assets or capitalizing the expenses. Thus in 2007 this fraud technique was used in 46% of the fraud related companies while at the end of 1997 only 43% of the companies using fraud had this problem. Nevertheless, the occurrence of misappropriated assets rose with 2%, from 12% at the end of 1997 to 14% in 2007.

Thus, the most common fraud related with the assets is the misstatement of asset accounts. Furthermore we will present the numbers of the main techniques used to misstate the asset accounts as they were enumerated in COSO's survey. In addition to the information provided by COSO we will also explain the way each of those frauds might occur.

The most encountered fraud scheme, regarding the misstatement of asset accounts, was **inventory** with a total of 51 of 173 cases (29%). Inventory is one of the most common methods used by the employees to remove assets from accounting books before or after they are stolen. Some inventory fraud schemes may include: counting nonexistent inventory or sold merchandise that is being warehoused for customers, ignoring the value of obsolete, damaged or slow moving inventory, operating changes in inventory's accounting methods or overvaluing existing inventory.

Accounts/Receivable frauds with 43 cases (25%) were mentioned on the second place. This fraud scheme usually appears when the perpetrator is adjusting the entry to a perpetual inventory and cost of sales accounts even if there is no sales transaction in the accounting records to prove those entries. As a consequence, the perpetrator is "fixing" the problem by entering a debit to accounts receivable and also a corresponding credit to the sales account in order to be sure that the missing goods appeared as they were been sold.

Property/ Plant and Equipment (PP&E) were signalized in 24 cases (14%). This fraudulent approach may imply the recognition of expenses as acquisition of PP&E with the main purpose of delaying the entire immediate expense. Other techniques may include the reducing or delaying of the depreciation or overrate PP&E's value.

In 19 cases (11%) the fraudsters appealed to **cash/ marketable securities** schemes. Those assets are susceptible to be stolen because of their intrinsic features including a high rate of liquidity, marketable securities are extremely liquid as they tend to have maturities of less than a year. As for the cash the most common frauds include skimming schemes, attacking the receipts process, in which money is stolen before it is recorded in the victim organization's accounts and billing schemes, attacking the payments process comprising methods like false invoicing via shell companies, false invoicing via non-accomplice vendors and personal purchases made with company funds.

Loans/ Notes Receivable/ Mortgages were identified in 13 cases (8%). Those techniques include actions meant to deliberately omit relevant information regarding a mortgage loan application with the purpose of obtaining a loan or a larger loan that would have been obtained if the lender or borrower knew the truth.

Investments problems were also noticed in 12 cases (7%). For example, a common used scheme is overvaluing the investments when there isn't any readily available market or in the case of transactions made with related parties.

And nevertheless not listing **prepaid expenses** with a purpose of making a company's profit performance look better than it actually is, was used in 11 cases (6%).

Monitoring the quality of internal control system through internal audit

It is obvious that in compliance with the information provided by COSO, fraud not only continues to exist but is starting to become a more complex and worsen phenomenon. This is a signal of how important control systems are in order to prevent fraud from occurring. As it was stated before not the mere existence but the performance and viability of internal control matters and those are given by a suitable activity of updating through constant monitoring.

Furthermore we will discuss about the main concerns that should be taken into consideration by internal audit during a monitor activity in order to strengthen the internal control system and implicitly to protect the existence and value of the assets.

Assess the level of involvement manifested by the managers regarding the implementation of internal controls. The purpose of this activity is to identify if there is an established foundation for the activity of monitoring and if not to create the needed monitoring awareness among managers. The integrity starts at the top and the integrity of the managers is an essential factor in establishing strong internal controls. The managers at all levels of the company must lead the way to ensure internal controls are updated and respected. Also, a critical element is the attitude of managers regarding the way they cooperate and work with the subordinates. The relationship between management and employees must be professional and correct. Managers must impose to all of their subordinates to apply the procedures of internal control and are forbidden to implement a control based only on blind trust. In addition, managers are not allowed to hide any criminal activity of their subordinates. Every manager must be aware that any hidden fraudulent activity can become in a long run a festering wound for the company affecting not only its image but also its capacity to exist and to function effectively.

Identify the factors of pressure that can lead to fraud. Pressure is the factor that is engaging an individual to commit fraud. This can comprise almost everything starting from medical bills, expensive tastes to addiction problems but the core issue comes always from a significant financial need or problem. Even so, there are cases in which fraud is committed simply out of greed. Regarding the thinking of a fraudster, one will always believe that his problem must be solved in secret and even if he considers or not that his crime is justified there will be few cases of self-denunciation. This is not only because the perpetrator knows he could be punished but also because fraud is seen as a crime of betrayal and often goes underreported precisely because it is so personal and embarrassing. Furthermore both managers and employees can become fraudsters if there is the rationalization, opportunity and pressure to perpetrate fraud. According with COSO's Fraudulent Financial Reporting 1998-2007, the high leadership of a company was directly involved in fraudulent activity: in 72% of the cases the CEO, in 65% the CFO and in 83% of cases either the CEO or CFO. In comparison, the lower level employees were engaged in only 10% of frauds and the controllers in 21%. For the normal employees common source of pressure may come from medical problems, drug or alcohol addiction, civil lawsuit, criminal conviction, dissatisfaction at the working place or simply greed. In addition with those, the high percentage of executives involved in fraud cases is explained by the fact that often managers and executives hold on their shoulders a lot of pressure that is constraining them to commit frauds. In their case the motivation for perpetrating fraudulent activities might be given by several reasons such as: the need to meet internal and external earning, the attempt to conceal the company's deteriorating financial condition, the need to increase stock price and nevertheless the desire to increase management compensation based on financial results.

Build relevant scenarios that could potentially occur resulting in a material impact on assets. This implies a more proactive rather than reactive approach of the risk of fraud existing within the company. Internal auditors should create a database containing the most eligible fraud scenarios that could take place considering the existing conditions created by the managers' attitude and behavior and also by the pressure factors. For each fraud scenario there must be a

description of the way it could be perpetrated within the company, the individuals that might be involved and the types of assets that might be affected.

Test, assess and improve the capacity of internal control system. According with the level of involvement proved by the managers and the existing pressure-factors the internal control system must be assessed and his potential diagnosed. Based on the previous documented fraud scenarios, any internal controls that could prevent or deter the fraud related with the assets must be updated or created in order to satisfy the existing requirements. Nevertheless when updating or creating internal controls one should not forget that the driving principle behind strong internal controls is segregation of labor. In any given situation, the more record keeping duties that can be segregated the better. If one person is responsible for both maintaining the record and the asset, there are many opportunities for procrastination, abdication of the task and theft (Heinke 2010: 52).

Assessing the results of the new and/or updated internal controls procedures and correct the anachronisms. The purpose of monitoring is to improve and update continuously the internal controls. There is no point in conducting a monitoring activity if is not continuing and with the purpose of constantly improving the already existing control system. Thus a permanent oversight and diagnose of the way updated or new internal controls are running and behaving is imperative in order to test the effectiveness of changes made according to monitor's findings. Nevertheless the controls that are not delivering the expected results must be reassessed and strengthen in order to make them eligible for achieving their purpose.

Conclusions and further research

The war against fraud is becoming sharper as the limited resources and a possible lack of credibility from stakeholders, employees and general public caused by potential fraud scandals may affect the image, performance and financial position of the company. As frauds against assets multiply, internal audit will be demanded to expand its objectives comprising also activities that could deter fraud. Because of this for the internal audit of tomorrow it will be impossible to ignore the value of any instruments or processes that can streamline its work reducing the total amount of cost and raising the benefits. Therefore the activity of monitoring and updating the control system will be imperative in order to help internal audit give a proper answer to the future requirements. As we stated in this paper we recommend internal audit to undertake the monitoring quest due to its objectiveness, independence and professionalism. Still there are at least 2 things that impose further research. Fraud is not an accounting problem but a social phenomenon. Even if internal audit function has the privilege of being subordinate to the highest management level in an organization as it was shown in COSO's surveys in the majority of cases the high leadership was involved in fraud schemes therefore the potential of internal audit to apply the needed measures in order to update and strengthen the internal control can be affected. Further research regarding the way the independence of internal audit can be enhanced is needed. On the second place, as any other activity, internal audit is hamstrung by a limited budget. The total amount of money invested in an audit function varies according with company size, industry type, inventory, operating flows and nevertheless the audit committee review regarding internal audit work and budget. Thus, a balance between the costs involved in a monitoring activity and the benefits from providing a continuous internal control monitor must be achieved in order to raise the effectiveness of the overall controlling effort conducted in the company.

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ISSUES RELATED TO THE ACCOUNTING TREATMENT OF THE TANGIBLE AND INTANGIBLE ASSETS DEPRECIATION

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The issue of accounting depreciation is an older concern of this study's authors on the incidence over the true and fair view of the earning and the net value of the non-current assets. Proceeding from the consideration that the present depreciation methods, acknowledged by the accounting standards and regulations are not sufficient to render the reality of the irreversible impairment of the fixed assets nor that of the material and immaterial investment recovery we performed a research on the indicators reported by 20 companies in Cluj county and we applied a questionnaire to each entity on the depreciation methods used, their incidence on the true and fair view and their proposals for the completion of the depreciation methods.

The objective of the research is to identify the most appropriate depreciation methods, truthfully illustrating the effects of the irreversible impairment on the net asset and on the earning, to introduce the excluded assets in the category of the non-current assets (like property and plant, goodwill, intangible assets created with ones own strengths) and the enforcement of appropriate treatments to the revaluation differences and their own overhead investments.

The International Accounting Standard IAS 16 – Property, plant and equipment refers to three depreciation methods: the straightline method, the diminishing balance method and the technical depreciation method (units of production method). In Romania only two of these methods are accepted: the straightline method, the diminishing balance method and the accelerated method was additionally instilled, which is used internationally in exceptional situations and not currently.

The results of the research led us to the following conclusions:

- for the depreciation of the machinery, facilities and technological equipments it is recommended to use the technical depreciation method or the units of production method;*
- taking into consideration the financial conception on the non-current assets the depreciation of all categories of tangible and intangible assets is recommended, the purpose being the gradual recovery of the investment in these assets and not the covering of the wear and tear or obsolescence;*
- the surplus value resulted from the revaluation of the tangible assets musn't be depreciated because it generates in fictional expenses;*
- the depreciation of the overhead assets musn't be acknowledged as an expense but it should be treated as a reduction in the income resulting from fixed assets;*
- the completion of the depreciation concept with its financial meaning, namely the process of recovering the investments in tangible and intangible assets;*

The application of the research results leads to correcting the image provided by financial reportings on the tangible and intangible assets contribution to the income, the depreciation's reflection in the expenses and the net value of these assets.

The contribution of the authors consists in interceding to ensure the application of the research results by modifying and completing the national accounting rules in order to achieve accounting's consecrated objective: reproducing a true and fair view on the financial position

and performances. These issues have not been addressed in other specialty studies in the country or abroad.

Key words : irreversible depreciation, accounting depreciation, technical depreciation depreciation, provision for positive reevaluation differences.

JEL Codes : M41, M42

I. Introduction

The tangible and intangible assets are material and value investments with the period of usage exceeding the length of a financial year. As these assets do not run to waste after their first usage, the depreciation process is used to consign that part of the value which is transmitted on, to the goods, workings and services. In the literature there are three depreciation concepts that stand out, namely:

- The economic concept according to which depreciation is the process whereby the value equivalent of an asset's irreversible impairment, due to the use of the natural factor's action, the technical progress or other reasons, is transmitted on, to the value of the goods, workings and services.
- The financial concept according to which depreciation is the process of gradually recovering the investments in tangible and intangible assets as a result of the contribution of these goods to achieving the added value.
- The accounting concept according to which depreciations is the systematic allocation of an asset's depreciable amount along its useful life, by recognizing as an expense in accordance with the asset's contribution at the achieved economic earnings ;

Summarizing the above three concepts one can conclude that depreciation is the process of systematically assigning the depreciable amount of an asset along its useful life with the purpose of ensuring the investment's recovery and/or the compensation of the irreversible impairment, as a result of the usage, the action of the natural factors, the technical progress, etc. In accounting terms, the value calculated as the share to be allocated is subject to depreciation and is called redemption. The depreciable amount of tangible and intangible assets is represented by the accounting value diminished with the residual value (recoverable amount at the end of the useful life). In Romania, according to the consecrated practices the residual value is considered to be void. The useful life according to international accounting standards is defined based on company's estimated utility for the concerned asset, based on the experience with other similar assets.

There are three variables standing at the basis of establishing the redemption:

- asset's depreciable amount
- useful life
- depreciation method.

These three variables define the size of the redemption and in give in the end an image on the activity's earnings and the net value of the assets.

Starting from these premises we initiated the reasearch on the way of establishing the redemption as well as on its accounting treatment taking into account its effects on the results and on the net asset but also a reasearch on the capitalization/de-capitalization of the economic entities.

The research goals are focused on the following directions:

- a. establishing the size of the redemption with the purpose of objectively reflecting an economic reality, including the acceptance of new depreciation methods
- b. changing the accounting treatment applied to the fixed assets which do not suffer from physical and moral wear, but are investments to be recovered over the business's lifetime

- c. applying accounting treatments which are appropriate for the depreciation of the revaluation differences and of investments made with ones own strengths

The questions that the present research is answering at have also been subject of the questionnaires applied in 20 companies in Cluj County, and they refer to:

1. What depreciation method do you apply?
2. Does the used depreciation method reflect the economic reality of the irreversible impairment and of the investment recovery? In the case of technological equipments would you choose the technical depreciation method provided by the international accounting standards?
3. Is the useful life of the depreciable assets established based on the Tangible assets Catalogue issued by the Ministry of Finance or by a technical committee which reviews the asset's operating conditions and the economic benefits the asset is expected to produce ?
4. Do you consider that the exclusion of some assets from the amortization- land, goodwill, etc. – generates overated results?
5. Does including the positive revaluation differences in the expenses as the asset is being depreciated, represent an artificial increase of losses
6. Does the inclusion of one's own investmens in the expenses as the depreciation is in progress represent a reduplication of the expenses?

II. Literature analyses, previous researches and field practices

Being a regulated industry the literature is insufficient, the existing one being limited to promoting the actual rules and very little to analyzing the incidence on the fair view. The Romanian literature partially accepts the depreciation methods under the international accounting standards and the european accounting regulations which does not ensure the convergence with the international depreciation meanings. The foreign literature promotes diversified depreciation methods in order to provide a sufficient basis for the real systematic allocation of the fixed assets shares on the expenses against the benefits from these assets. The international accounting standards IAS 16 – Property, plant and equipment, IAS 38 – Intangible Assets and IAS 36 – Impairment of assets are the starting point in achieving this research. In addition we relied on the european and national accounting regulations and on the accounting studies (books, manuals, articles, etc.) published in Romania in the last two years.

III. Research methodology

The present study is an applied research having the purpose of correcting and addressing weaknesses in the approach of the fixed assets depreciation process and in treating the accounting information. The research was based on the study and the interpretation of the international accounting standards, the European reglementations, the national accounting rules and on the application, processing and analysis of the 20 questionnaires containing the questions to be answered by this research. The use of the study, surveys and observation is relevant to see the option of improving some accounting regulations which in some cases do not reflect the economic reality when being applied. In regard to the 20 sample companies we consider to have chosen important businesses, involving the management of fixed assets with a significant share in the total assets of the chosen companies, being part of the large (8) and medium (12) companies.

IV. Research's results

After the questionnaire processing the research results on the addressed topics were the following:

- With regard to the applied depreciation method 87% use the straightline method for all the tangible assets, 9% the straightline and the diminishing balance method and 4% the straightline, the diminishing balance and the accelerated method

- The used depreciation method reflects the economic reality of irreversible impairment, respectively of investment recovery in the cases of constructions, furniture and intangible assets. All the respondents felt that in case of technological equipments these methods do not reflect the economic reality and that the technical depreciation should be accepted by the regulations
- Regarding the useful life of depreciable assets 82% responded that it is established by the Tangible assets catalogue issued by the Ministry of Finance and only 18% established a technical committee to review the asset's conditions of operation and the economic benefits this asset is expected to produce
- Excluding some assets from depreciation is considered an error because the investment in land contributes to future economic benefits and the built land doesn't have the same value as the open one. For any other investments in intangible assets it is considered that they should be depreciated if they produce future economic benefits, otherwise being considered a waste. The overvaluation of the results as a result of not depreciating the lands and other assets leads to false profit declaration and business decapitalization by paying taxes on income and dividend distribution.
- Including positive revaluation differences in the expenses as the asset's depreciation is in progress is considered by 64% as being an artificial increase of the losses, trying to force an equity increase on the behalf of the expenses.
- All the respondents agreed upon the fact that including one's own investments in the expenses as the depreciation is in progress is a mistake, the option being the reduction of revenues coming from fixed assets production.

The conclusions this research is conducting are:

- for the depreciation of machinery, facilities and technological equipments the use of the technical or the units of production method is recommended. This method ensures the recognition of the amortization as an expense in regard to the use of machinery, facilities and technological equipments for achieving future economic benefits.
- starting from the financial conception on fixed assets and their capacity to produce a profit the armonization of all asset categories, tangible and intangible, is recommended, the purpose being the gradual recovery of the investment in these assets and not only the covering of the physical and moral
- the ups in value resulting from the revaluation of tangible assets do not have to be depreciated because they generate fictitious expenses. If one wants capitalization at the level of revaluated value for the positive revaluation differences we consider the creation of a provision for positive evaluation differences as being indicated. Even more since these positive revaluation differences can be reversible and they can diminish at a further assessment.
- the depreciation of assets achieved on its own account shouldn't be recognized as an expense but it should be treated as a diminishing in the income coming from fixed assets.

The results of this research are supported by the answers to the applied questions and from our estimations they reflect the conceptions of the majority of business manager which are interested in the true and fair view of the business administration and not due to regulations that are not based on a minimum of applied research.

V. Conclusions

The application of this research's results will lead to the normalization of the image offered by the financial reporting of tangible and intangible asset's contribution to the income, the depreciation's reflection in expenditures and the net value of these assets. Acceptance and implementation of the technical depreciation method will lead to recognising the redemption for

using the asset and also the depreciation of land and other assets excluded so far, will be the basis for achieving the real economic benefits. All those majoring in accounting, who will apply the knowledge gained from this research's results will see a profound change in the economic activity's outcome and will understand that the accounting judgment should be based on capturing and reproducing economic realities, using numbers and not blindly applying accounting regulations which leave aside the international accounting standards.

The contribution of the authors consists in interceding to ensure the application of the research results by modifying and completing the national accounting rules, as well as the alignment with international accounting standards, in order to achieve accounting's consecrated objective: reproducing a true and fair view on the company's financial position and performances. The study is unique as these issues have not been directly addressed before in other specialty studies in the country and abroad.

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STAGES OF DEVELOPMENT WITHIN THE ROMANIAN FINANCIAL ACCOUNTING SYSTEM IN TERMS OF LABOUR PROTECTION FOR THE EMPLOYED WORKERS IN ROMANIA AND IN OTHER EUROPEAN COUNTRIES

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This paper aims to highlight the main stages of development within the financial accounting system for the protection of the personnel engaged in Romania and at the same time, to compare it with the one of other European countries. The importance of the work consists in identifying forms of social protection through the legislative framework in order to achieve a diagnosis of Romanian social welfare. As a research model used in a particular study, the methodology includes information accompanying theoretical basis and methods for it. This paper contains a positivist tinge and it's constructive, going with the research's mainstream. Of course, one aspect is not left out: the critical approaches to the accounting referential standard concerning the protection of the staff in Romania as well as in Europe.

The foundation of the research is represented by the last decades' economic reality. The work tries to find answers to the question: "How did the Romanian social protection develop and which was its legal framework?" The research type is a deductive one which means that there's a way crossed from the general to the particular, starting from a theory which has as purpose applying the prediction itself and, at the same time, assuring a wider range of knowledge and being more operative. Information gathering was done through various methods such as quantitative and qualitative research and the pieces of information presented in this paper were collected from various sources such as published articles, books, legal documents, all from the economical field. Afterwards, the collection of the pieces of information was followed by data analysis. Having this as purpose, the following research methods and techniques have been applied: cross-section (analysis protection staff at a time) and longitudinal (protection of staff development in Romania), survey (protection of staff is described, compared and explained in Romania and the European context), non-participating observation (as statistical data) and analysis (collection, sorting and interpreting the information in the protection of staff in Romania). Research results and general conclusions concerning the information system for the protection of staff are listed at the end of the paper.

Keywords: social protection, stages of development, insured, labor code, social security accounts

JEL Code: M41, G01, K31

1. Introduction:

The social protection manifests itself by a series of measures more or less material, which follow practical, compelling and action-oriented ways and which vary according to the covered population segment which they refer to. Also, it has to do with different branches and the intensity and diversity of the measures vary according to these branches.

The social protection systems can be divided into two categories: (Buzducea, 2009:17):

- the universal system type which provides fixed indemnities for the permanent citizens or for the ones who have been a number of years without reliable income. Usually, this system is funded

annually from the state budget and it includes pensions, pensions for workers with disability, widows and orphans, and family allowances. Some of these systems are partially funded from contributions given by employees and employers.

- the mandatory or voluntary system type: social insurances guarantee for the protection of people who were named insured against certain situations that may arise and are related to the worker's income before the loss of working capacity. It is funded in whole or in part by special contributions - a percentage of revenue – by the one who respects the conditions. In some countries, social protection is ensured either by choosing one or another of these types of systems or by using both types. At the same time it should be noted that in most countries, some categories of employed (military, civil servants, miners, teachers, lawyers, artists) fit special types of insurance systems.

2. Social Protection Reform in Romania compared to other European countries

Along with the transition to market economy was implemented the policy of social insurance, the most important role was played by the Minister of Labor and Social Welfare, which, since 1968, took over the management of the state social insurances from the General Union of Trade Unions being in accordance with the 783/1969 Decree on the organization and functioning of the Ministry of Labor. As a consequence of the transition to a market economy, after 1990, the existing social security system was updated and modified its permanent adaptation to new economic conditions being a must. Thus, new demands for expansion and improvement of the social insurance system arise, expanding social insurances inevitably and perfecting the existing ones. (Calu, 2005:21). Thus, the State Social Insurance Law 49/1992 shall be drawn amending and supplementing certain provisions of social security legislation. This law amended the 389/1972 Decree on social insurance contribution, so that the contribution of the legal and natural persons having paid employee can be determined differently. Since 1990, the legislative staff protection system has undergone many changes. A comparative study on the evolution of social protection in Romania is presented in the following table:

Table number 1.A comparative study on the evolution of social protection in Romania

Before 1990	After 1990
- the social-insurance contributions - differentiated rates on branches and sub-branches of the economy within the payroll (14%, 25%, 15%)	- social security contributions - undifferentiated rates on the payroll (the social insurance budget law)
-the amount of aid materials for temporary disability is calculated in accordance with the length of uninterrupted work, the tariff wage in the month of calculation(monthly average number of working days = 25.5%) * the percentage commensurate with the seniority.	-the calculus basis consists in the salary average for the last six months, the condition to receive indemnities being provided by the existence of a minimum contribution period.
-the percentages for calculating the material aid are 90% for an over 8 years seniority or 12 months in case of maternity	- the percentages used to calculate indemnities for temporary disability are lower, which means 85% for over 8 years seniority or 12 months in case of maternity.
-the pensions calculated as the average of basic pay and permanent bonuses over the past five years of continuous work, taken by choice	- the pension system reformed and becomes a public system of modern pensions, expanding the categories of participants required to insure (including those who

from the last 10 years of activity	work under an exclusive contract for civil convention); terms specific for the insurance system are released (insured risks, contribution internship, assimilated internship, pension point value, the insured, employer, etc.)
- existence of the 3% pension contribution for the extra pension on the basic salary plus permanent bonuses	- the employee's individual contribution
- the total payroll tax paid by the economic entity	- individual wage tax paid by the employee

Source: made by the author

Before 1990, safety at work was provided by pensions and other rights for social assistance and health. The weaknesses of the social protection system during communism can be summarized as it follows:

- the unemployment was poorly addressed;
- there was a low migration of the international labor;
- the salaries were not correlated with labor productivity.

Best parts of the communist welfare system are considered to be the following:

- establishing the first legislative measures;
- the system was improved and reformed commensurately with the developed European countries (the french and the german models).

In Romania, after 1990, the changes in the system of social protection generated changes in the accounting system and the appearance of different accounts. After 1990, social welfare developed and modernized in harmony with the EU. Specialized institutions have emerged as well: The public system of pensions and other social security rights, the health insurance system, the social protection of maternity in the workplace, the insurance system for work accidents and occupational diseases, the unemployment insurance and the boosting work system.

This social system has been enriched with new forms of protection:

- The Maternity Protection at work by measures capable of preventing the women's exposure to risk:
- the right to leave for maternal risk (the 423 account "Other social benefits granted to employees");
- the right to child allowance until the age of 2 years.
- The contributions paid by employers responsible for health and safety measures at work;
- prevention of occupational accidents and occupational diseases (2002);
- rehabilitation and compensation.
- Social protection done through social health insurances in order to implement national health programs through: preventive medical assistance services, medical services and hospital outpatient services, dental care, emergency medical services, medical services for rehabilitation, medical care, pre, intra and postnatal care, nursing home, medicines, medical supplies, prosthesis and other special services.
- The social protection of the unemployed through the unemployment insurance system and stimulation of employment.

1. Active measures:

- regarding the employers: information and counseling, work mediation, professional training programs, consulting and support in order to start a new business, supplementing the earnings of employees, encouraging labor mobility;

- regarding the insured: subsidized employment, loans on favorable terms to create new jobs, other benefits.

2. Passive measures: offering the unemployment aid. From an accounting perspective, the 437 account "Unemployment fund" hasn't changed over the years.

Social Protection in Romania was placed on a new basis once with the transition to the market sector. It evolved and changed constantly, adapting to the needs of the Romanian economy, to the requirements of practice as well as those imposed by the political manifestation. Health insurance is the main health care system. It is mandatory and offers a free choice entitlement regarding the doctor of the insured, as well as of the health unit and of the Health Insurance Company. The main source of income for the state social insurance budget is represented by the contribution to the social security fund and it is calculated by applying percentage rates on the salary payroll, rates which are differentiated by branches and sub-branches of national economy.

A new report released by the World Bank Group and PricewaterhouseCoopers show that 45 countries around the world have simplified procedures for the payment of fees, with 25% more than in 2009. Despite this, our country hasn't taken a step forward and the payment of taxes and contributions in the local economy hasn't been eased. Romania ranks as the 149th country out of 183 countries, in terms of ease of payment of taxes and contributions and as the 182nd economy out of the 183 analyzed economies concerning the number of required payments (4 times more payments of taxes and contributions in comparison with the global average number of payments). Since January 1990, once with the transition to the market economy, in Romania, the possibility to stop activity has been obvious, the reasons being beyond the work of staff. This fact was not acknowledged, even though it appeared in the socialist economy. Thus, from 1st of May 1990, all business units and the state budget, private establishments, cooperatives, and individuals who use salary work will contribute to the establishment of a fund which will be managed centrally by the Ministry of Labor.

Today, in crisis, an evolution of the unemployment rate rose to 8.1% in January 2010, the maximum unemployment rate not being reached yet.

The private health insurance is an operation whereby an insurer is, on the principle of mutuality, an insurance fund, by the contribution of a number of policyholders exposed to production risks and compensate the people who call them to use extra care package on the account of the fund established the earned bonuses and other income due to the resulting activity. In Romania, the private health insurance for payment of medical services is an additional voluntary system of compulsory health insurance (which covers a basic package of services) and it covers an additional package of services. Given that in 2009, the budget for social health insurance system for laboratory investigations has been halved compared to 2008, more and more patients will use private services, if their "pocket" allows it. The budget crisis affected the whole market of private medical services, the negative effects being felt especially among the insured patients who could not benefit from security deductions from the Health Insurance Company because of the lack of state funds. Thus, private health care services gained more ground, fact which made the players in the industry to predict for 2011 an increased turnover, by 10-20%. In Europe, the social protection principles are roughly the same, social insurance system having as purpose the protection of workers against risks of loss of income during unemployment, illness or disability, and to carry out parental duties until a certain age. The employers calculate and retain the contributions from employees. The Labor Code is the one governing the rights and obligations of employees and employers and the management of the human resources implies the compliance with social norms, such as the principle of discrimination, gender equality and health and safety at work. Within the EU, the citizens of our country and the one of the Union have the same access to employment. There are, however, some countries such as Austria, where foreign workers can access the labor market only under certain circumstances. Most European states have

established a minimum monthly salary (somewhere between 120 Euro and 1400 Euro), but there are countries where it is not established by law, but by collective agreements (Denmark, Finland, Italy, Sweden). In 2009, 350.000 romanian people went to work abroad, most preferring to engage in agriculture, hotels, restaurants or medical field, according to NEA. Although the living standards and the foreign earnings of the Romanian employees have been changed under the imprint of the global economic crisis, few have opted to return to the country and the exodus of the Romanian will continue in 2011, mainly due to lack of job offers on the local market and job insecurity or low remuneration in comparison with European employers offer. We present below a comparative study of the social protection system between Romania and another European countries:

Table number 2 . Comparative study of the social protection system between Romania and another European countries:

Criteria/ Country	1	2	3	4	5	The national minimum salary in 2010
The United Kingdom	X	X	X	X		5,8 pounds/month
Austria	X	X	X	X	The foreign workers can access the labor market under limited circumstances	1014 Euros/month
Bulgaria	In 2010 the report of the social insurance payments done the employee and the employer was: 50:50	X	X	X		123 euros/month (240 leva /month)
Danmark	X	X	X	X	X	Established by collective agreements
Switzerland	X	X	X	X	X	There's no minimum salary guaranteed by the Swiss legislation
Finland	X	X	X	X	X	Established through collective agreements
France	X	X	X	X	X	1343,77 Euros/month
Germany		X	X	X	X	4 Euros/hour(it is established through law just in branches)
Greece	X	X	X	X	X	740 Euros/month
Italy						Established through collective agreements
Hollanda						1407 Euros/month
Poland						300 Euros/month (1317 zloti /month)
România	X	X	X	X	X	Aproximately 145 Euro/month (600 de lei)
Russia						120 Euros/month (4330 Russian rubles/month)
Spain						633,3 Euros/month

Criteria/Country	1	2	3	4	5	The national minimum salary in 2010
Sweden						Established by collective agreements
Turkey	He made little progress in bringing its legislation in line with the Community acquis			He made little progress in bringing its legislation in line with the Community acquis		390 Euros/month (729 Turkish pound /month)
Hungary						280 Euros/month (73.500 HUF/month)

- 1 - Social Security System aims to protect workers against risks of loss of income during unemployment, disability and carrying parental duties until a certain age
- 2 – Employers calculate and withhold the employee contributions
- 3 – The Labor Code regulates the rights and obligations of employees and employers
- 4 - The existence of discrimination, equality among sexes and health and safety at work
- 5 - Equality between nationals and EU citizens

Source:

www.ec.europa.eu

From the perspective of the accounting, in all these countries, the mentioned forms of social protection are recorded through the duty accounts (Class number 4) and expense accounts (class number 6).

Conclusions:

Whether or not EU member states, the goal of all countries is to protect workers against risks of loss of income during unemployment, illness or disability, as well as to help them to perform parental duties until a certain age. Regulation, rights and obligations of employers and employees are made by the Labor Code. Romania stands in the last place among the countries of Europe, as more and more studies show it nowadays. This situation is obvious from the stage of development of the country until the national minimum wage / salary.

Therefore, it is no surprise that many Romanian people prefer to go to work abroad, even working in the field in which they have expertise, earning a 15 times higher payment than in the country. If many of the developed countries, focused globally and increasingly on private pension funds (70% of GDP in 2010), releasing pressure on the state budget in Romania, they represented only 0.5% of GDP 2010 burdening the state budget.

The World Bank has already announced that the public spending on pensions (state) will increase on average across the EU, from 10,2% of GDP (in 2010) to 12,5% (2060) because of the reduction of the birth rate, aging and reduction amid population, while in Romania, by 2060, this would double. A unanimous opinion is that the Romanian public pension system has to be reformed quickly and efficiently by the acceleration of private pensions.

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- 2.Legea 53/ 24 ianuarie 2003 Codul Muncii actualizat
- 3.Legea 49/ 25 mai 1992 pentru modificarea și completarea unor reglementări din legislația de asigurări sociale

3. Internet Sites:

1. www.wall-street.ro
2. www.zf.ro
3. www.ziare.com

PRINCIPLES- AND RULES-BASED ACCOUNTING DEBATE. IMPLICATIONS FOR AN EMERGENT COUNTRY

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By a qualitative analysis, this research observes whether a principles-based system or a mixed version of it with the rules-based system, applied in Romania - an emergent country - is appropriate taking into account the mentalities, the traditions, and other cultural elements that were typical of a rules-based system. We support the statement that, even if certain contextual variables are common to other developed countries, their environments significantly differ. To be effective, financial reporting must reflect the firm's context in which it is functioning. The research has a deductive approach based on the analysis of the cultural factors and their influence in the last years. For Romania it is argue a lower accounting professionalism associated with a low level of ambiguity tolerance. For the stage analysed in this study (after the year 2005) the professional reasoning - a proxy for the accounting professional behaviour - took into consideration the fiscal and legal requirements rather than the accounting principles and judgments. The research suggest that the Romanian accounting practice and the professionals are not fully prepared for a principles-based system environment, associated with the ability to find undisclosed events, facing ambiguity, identifying inferred relationships and using intuition, respectively working with uncertainty. We therefore reach the conclusion that in Romania institutional amendments affecting the professional expertise would be needed. The accounting regulations must be chosen with great caution and they must answer and/ or be adjusted, even if the process would be delayed, to national values, behaviour of companies and individual expertise and beliefs. Secondly, the benefits of applying accounting reasoning in this country may be enhanced through a better understanding of their content and through practical exercise. Here regulatory bodies may intervene for organizing professional training programs and acting towards the improvement of the codes of conduct's effectiveness.

Keywords: emergent countries, rules or principles-based system, IFRS.

JEL: M41, M48

1. Introduction

The study investigates on the relevance of the principles-based/ rules-based debate for the current accounting period and for an emergent country. By a qualitative analysis, this research observes whether a principles-based system (hereafter PBS) or a mixed version of it with the rules-based system (hereafter RBS), applied in Romania - an emergent country – is appropriate taking into account the mentalities, the traditions, and the cultural elements that are typical of a RBS. Particularly, it investigate, comparing to the accounting regulations for which it argue that, in Romania, are currently a mix of principles and rules, the extent to which principles- characteristic of the International Financial Accounting Standards (IFRS) that influenced financial reporting in this country- are applied at the practice level, which has been traditionally rules-based.

It starts from the PBS system versus the RBS system debate. This is related to the accounting systems classification. A review of the extremely rich literature on accounting systems classification is beyond the aim of this study restricted to reminding some of these valuable studies: Nair and Frank 1980; Nobes 1983; Joos and Lang 1994; Nobes 1998; Alexander and Archer 2001; D'Arcy 2001; Nobes 2004; Sellhorn and Gornik-Tomaszewski 2006; Rossignol

and Walliser 2007. Historically speaking the established groups of accounting systems were: Anglo-Saxon or Anglo-American (AS)- Continental-European (CE); common law- code law; principles based system (PBS)- rules based system (RBS); shareholder-oriented - stakeholder-oriented; investor- creditor protection. Between the above criteria, this study focused on PBS, respectively RBS.

The remainder of the paper is organized as follows: Section 2 presents reference to the items important for this research in the literature, Section 3 develop the qualitative analysis, and the final section comments on the compliance between accounting rules and accounting environment and concludes on the accounting perspectives for an emergent economy.

2. Principles- and rules-based accounting debate – a literature review

Rating an accounting system as a principle- based or rules- based has become again topical after the financial scandals from the beginning of the 21st century, the most famous one being the Enron case, that have generated a crisis of confidence in financial reporting practice and regulation (McKernon and Kosmala 2007) mainly due to some companies that have followed the letter and not the spirit of the laws (Ball 2009). These scandals were the most impacting warning signals as to the need of changing the accounting environment from a rules - based one into a principles- based one in USA and from here in the entire world.

The PBS- RBS controversy features the Financial Accounting Standards Board (FASB), United States Security Exchange Commission (SEC) and the critics of standards or their actions. Being advocated the need to move towards a more principle-based financial reporting system, the FASB and the International Accounting Standard Board (IASB) signed the 'Norwalk agreement' (2004) aimed at the alignment of US GAAP and IFRS. It was agreed in this way that the American Standards are rather RBS, as opposed to IFRS that pertain to PBS. Therefore, the IASB conceptual framework is perceived as a guideline for both normalization and practice, whereas the FASB framework is just a guide for drawing up standards, the practice being dominated by rules (Feleagă 1999). However, there are opinions according to which the US GAAP are rules-based solely on the surface (due to their scope and treatment exceptions and detailed implementation guidance), de facto acting as a PBS (Schipper 2003; Ball 2009). Irrespective of these discussions regarding the American accounting system type, there certainly are difference between the US GAAP and IFRS and these should disappear with the purpose of converging the two sets of standards.

The descriptors of PBS are the fundamentals of accounting such as decision usefulness, true and fair view, going concern or substance over form. The system allows extensive opportunities for professional reasoning taking into consideration that specific requirements are kept to a minimum. This is also the talking point of the advocates of PBS which are scholars as well as standard setters from Anglo-Saxon countries. They also support the utility of this system which, having a deductive-normative approach, potentially gives more room for freedom of judgment to the practitioner (Feleagă 1999; Schipper 2003; McKernon and Kosmala 2007). Instead, a point is made on the laws and regulations (RBS) potentially affecting the degree of freedom and responsibility given to the accountant depriving the professional of bringing new interpretation and freshness of judgment to accounting decision-making. The Institute of Chartered Accountants of Scotland (ICAS 2006) argues that this system provides a comprehensive base and has flexibility to solve new test cases. The skeptics of PBS blame this flexibility that can be used to distort accounting information through earnings management (Nobes 2005). Finally, we note that the PBS, especially a genuine one (type A as per Alexander and Jermakowicz 2006) is supported by the concept of 'true and fair view' that in its turn raised an ongoing debate that will not be detailed in this study.

RBS is based on detailed provisions of solutions for most accounting cases, for which is unambiguously clear how and when it is to be applied. This system mentions and details what is or not is allowed. The main acknowledged advantage of RBS is that it increases financial information comparability facilitating auditors work in verifying the accounts (Schipper 2003). Even so, there are opinions that do not generalize the comparability advantage provided by RBS, suggesting that even such a system applied to various situations may lead to disclosure that causes confusions (Alexander and Jermakowicz 2006). Due to its stringency, in a RBS the professional have limited choices compared to PBS who give them latitude in accounting judgments (Feleagă 1999).

The main trend at this hour is the turn from rules to principles. His supporters argues for focusing attention on practice rather than on stipulated rules, that is what the companies are actually reporting (Ball 2009). It is asserted that this would enhance the professional, even moral judgment and as a consequence the truthfulness of financial reporting practices (McKernon and Kosmala 2007). The authors admit though that PBS is not infallible either, being prone, as well as its rival, to abuses. Pleading for recognizing the proper role of judgment in accounting practice, McKernan and Kosmala (2007) provides us with the solution of a gradual institutional change that includes a progressive relaxation of rules-dependency.

Within this frame of the current stage of the ongoing principles- and rules- based accounting debate, the present research singularizes the PBS- RBS typology to an emergent country, in the light of the IFRS tendency to spread worldwide (over 100 countries at this date, with plans for adoption by a number of others including United States by 2014). In order to analyze the Romanian accounting's evolution it is useful to mention that in literature, PBS is associated with a normalization based on conceptual framework, whereas RBS is associated with a normalization based on the chart of accounts. Also, generally speaking, PBS is superposed on the AS type accounting system and RBS is assimilated to an EC type.

3. Accounting in an economic emergent context – a qualitative analysis

Aiming to discover whether a principles-based system or a mixed version of it with the rules-based system is appropriate to the accounting environment specific to the current stage in Romania, we investigated the potential to integrate the views in the literature on financial reporting differentiation, specifically on the PBS-RBS debate with the economic context of the emergent countries and the orientation of this countries over the IFRS. The research has a deductive approach based on the analysis of the cultural factors and their influence in the last years.

If we refer to developing and emergent countries, out of which many adopted the IFRS, we support the statement that, even if certain contextual variables are common to other developed countries, their environments significantly differ (Hoarau 1995; Mir and Rahaman 2005). To be effective, financial reporting must reflect the firm's context in which it is functioning. Moreover, choosing a set of accounting rules under the influence of the political factors, either external or internal, might prove to be inappropriate to the market's development level, the firms' incentives, or the evolution of the accounting profession, all of these being the drivers of the economic, legal and cultural factors. A significant discrepancy between rules and the environment which persists in time or a significant fluctuation of the accounting rules diminishes the role of financial reporting.

The research looks at the tendency towards PBS showed worldwide and assumes that the tendency is not suitable to any context. Particularly, it is preoccupied by IFRS spread across the world. It sets forth the question of whether this single set of high-quality global accounting standards, IFRS- supported as rules based on demonstrations that compare them to US GAAP or UK GAAP- bring real economical and social benefits due to the accountancy of developing and

emergent countries with traditionally rules- based accounting systems. Is it not that ‘creative compliance’ with IFRS, observable in some countries as a result of enforcing international standards, especially in developing and emergent countries, covers up a diminishing role of an accounting not harmonized with environmental factors? The present study sets out proof for this assertion first of all through the example offered by Eastern European countries today members of the European Community like Romania. During communism these countries had accounting systems that represented adjustments of the Soviet accounting system (RBS type) (Bailey 1995; Richard 1995); afterwards, in the post-communism pre-adherence to the European Union (EU) period they adopted the accounting systems of the EU members from Continental Europe with which they had cultural affinities and/ or that had economical influences on these countries (European-Continental accounting system type- thus RBS, as the case of Romania and its connections to the French system as elaborated in studies like Matis 2001; Feleagă and Ionaşcu 1993; Ionaşcu et al. 2007). In some cases IFRS were adopted by obtaining endorsed-IFRS (the case of Hungary brought into discussion in Fekete’s 2009 study). The same countries adopted IFRS for the consolidated accounts of the listed entities and they harmonized their national regulations with the Fourth European Directive, in the post-communism EU post- adherence period, resulting in- if we would like to quote Romania again- a mix of European recommendations, respectively of concepts and treatments extracted from IFRS. Along with the Eastern European countries, other studies offer examples of transition from RBS to IFRS (PBS), studies containing historiographies of some developing countries- e.g. Ong et al. (2004) for Taiwan- China that assert the difficulty of using the IFRS in the Far East’s practice, this one being anchored on rules; Mir and Rahaman (2005) for Bangladesh, country for which a very low compliance with IFRS is observed due to the pressure exerted by international lending institution considered an undemocratic process of adoption; Hassan (2008), who taking Egypt as a case study shows that new financial accounting rules need to be implemented after a deep investigation of the complexity of the social, political and economic context, especially for less developed country in transition; his findings suggest that Egyptian regulations harmonized with IFRS are not entirely to meet user’s needs. As similarities of these studies we may notice the caution even the suspicions with which either accounting professionals or users of financial reporting regard national regulations change over the IFRS.

Bringing the discussion on the Romanian context, it is firstly important to define the actual accounting system. In the current period, that can be localized after the year 2006, OMFP no.1752/2005 for approving Accounting Rules Harmonized with the European Directives is adopted, which requires all entities to apply accounting rules aligned with the European rules, starting with January 1st, 2006. This act was replaced in 2009 by OMFP no. 3055 on January 1st, 2010, which brings some updating in compliance with IFRS. The action of the Ministry of Public Finances is justified by Romania’s imminent integration with full rights in the EU, integration that materialized at the beginning of the following year. The entities formerly considered ‘large’ applying in the previous stage rules complying with IFRS (PBS type), had to adopt in the current stage the new rules of RBS essence. In this stage IFRS are mandatory for the credit institutions and optional for the other entities considered publicly accountable. The movement in circle (from a RBS system to a PBS system and back) continues for some entities – namely listed entities – together with the compulsory adoption of IFRS for their consolidated accounts on January 1st, 2007.

With respect to the appropriateness of the current accounting system for the Romanian environment, critics regarding the adaptation of IFRS are based on the insufficient education in Romania, from a cultural point of view (the mentality), technical (needed knowledge, practical experience of Romanian professionals), and legal (accounting was strongly anchored in fiscal rules). Ionaşcu et al. (2007) quotes Roberts (2000) when he states, regarding the East European

countries, that the mixture of accounting philosophies through superposing of an Anglo-Saxon accounting system on a legalistic one is a cultural intrusion. In the same manner, Nobes (1998) shows that the introduction of a system of class A (AS type) in former communist countries might be inappropriate; except for the case in which a development of the capital market associated with the AS system is observed, like in the case of large or listed entities. Certain studies (Bailey 1995; Ionaşcu et al. 2007) show that cost-effectiveness of the respective changes was insignificant for the developing and emergent countries, at least during the implementation period. The difficult adjustment to the new accounting rules of emergent countries (mainly to IFRS) is confirmed by other studies as well, for example Bailey (1995), Ong et al. (2004), Ionaşcu et al. (2007), Fekete (2009).

Discussion and conclusions

At this time the views of most specialists on the prevalence of principles on the rules or, at most, a mix up of rules and principles. Rules should reinforce a principle rather than pre-empting or rendering it meaningless. For example, ICAS proposes a high level principle with a minimum of guidance. This should be associated with institutional and legal changes for reducing the number of rules and establishing guides, respectively with the development of accounting professional as expertise and ethics (ICAS 2006). It is also pointed out that RBS-PBS debate was based rather on political and polemical concerns than on conceptual ones (Alexander and Jermakowicz 2006). The same authors assert that the human behaviour is decisive for quality assurance of the financial reporting and for reflecting a fair image of the economic sphere. This viewpoint is also shared by Quinn (2003) who emphasizes that the most important aspect is honesty without which any system is vulnerable, including a PBS type. Good ethics and a good governance system would be needed. We notice the focus on people, on the personal behaviour, on the expertise and expert. These ideas are linked to the findings of studies focusing on the social character of the accounting that depict the movement towards a society increasingly populated by experts (Lowe 2004).

Based on these assertions, as concern the accounting Romanian future, it is to ask if the environmental factors, which we titled accounting environment, can support a PBS system.

Therefore, we will discuss on the Romanian environmental factors, stopping on the cultural ones. The cultural factors are implicit in the choice for accounting rules and within the accounting environment. Thus, we assert that choosing a RBS or a PBS accounting system (rules level) bears the print of cultural domination and cultural affinities of the country, together with the political choices. If we refer to this first dimension of the problem, as being the choice of accounting system – more rules or more principles based – we note the use of IFRS for a limited number of companies, respectively interferences of IFRS – PBS system on the rules applicable to other companies. That means that the European Directive, on which was ensured compliance of Romanian regulations, is influenced as well by IFRS and the PBS model.

Concerns the influence of the cultural factors on the accounting environment, we consider Hofstede's (1983) values discussed by Littrell and Lapadus (2005) for Romania, namely low individualism, uncertainty avoidance and high power distance. Gray (1988), while converting Hofstede's cultural values in accounting values, defines accounting professionalism in relation to the extent of individual professional reasoning in uncertainty accounting tasks. For Romania this means a lower accounting professionalism associated with a low level of ambiguity tolerance, argued also by Harding and Ming-Chuan's (2007) for China as a developing country, focusing on the cultural and social influential factors. If we also look to the accounting practice, we conclude that (also) in this stage, the professional reasoning - a proxy for the accounting professional behaviour - took into consideration the fiscal and legal requirements rather than the accounting

principles and judgments, assessment confirmed by the empirical study conducted by Buiga et al. (2010).

Finally, this synthetic qualitative analysis suggest that, related to a mix RBS-PBS accounting system, the Romanian accounting practice and the professionals are not fully prepared for a principles-based system environment. As Stevenson and Berger (2009) suggest, this kind of environment is associated with the ability to find undisclosed events, facing ambiguity, identifying inferred relationships and using intuition, respectively working with uncertainty, all these being closely related to the enforcement of the ethical behaviour. We therefore reach the conclusion that in Romania institutional amendments affecting the professional expertise would be needed. The accounting regulations must be chosen with great caution and they must answer and/ or be adjusted, even if the process would be delayed, to national values, behaviour of companies and individual expertise and beliefs. Secondly, the benefits of applying accounting reasoning in this country may be enhanced through a better understanding of their content and through practical exercise. Here regulatory bodies may intervene for organizing professional training programs and acting towards the improvement of the codes of conduct's effectiveness. The limits of the study are related to a certain themes which were not investigated enough in this space. Therefore, a future research can develop a description of the current Romanian accounting context, both in terms of rules, as well as practical level. Also, judging that the cultural dimension of the Romanian accounting presented above may not be completely verifiable at this date, it is recommended to extend this short study to the evolution of the profession in Romania, and to retesting of the cultural factors dimension.

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THE TRANSPARENCY IN THE REPORTING OF INTELLECTUAL CAPITAL: BETWEEN THE MANAGEMENT RESPONSIBILITY AND THE STAKEHOLDERS' REQUIREMENTS

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The increasingly ample orientation of the companies towards the intellectual capital is based on the rediscovery of this resource with (almost) unlimited potential, generating economic benefits for a company. Given its importance, the information needs of stakeholders on this line have increased. Thus, in this context, it was put the issue of reporting information related to intellectual capital and the transparency of information published by companies, given that its reporting is not currently regulated. The objective of this paper is to establish an answer to a question: Up to what limit should be made public information related to this capital, given that stakeholders want as much information, and managers only publish information that favors the company's image? In addressing this issue, the point of departure is the intellectual capital structure, most commonly found in the literature, namely human capital, structural capital and relational capital. With this structure, the paper establishes, as a first step, a series of relevant indicators relating to the three components from three different perspectives: resources, management achievements and future expectations. At first observation, the indicators are divided into two categories: financial and non-financial, the first ones targeting the company's performance in relation to the components of intellectual capital, and the latter ones having a pronounced social touch. Based on these indicators, the paper analyses whether a company is willing to publish information, particularly those with social influence, especially in the current conditions of intensely requested social responsibility. In addition to documentary research, we also consider the most important findings based on existing reporting arrangements of the companies, especially from the reports published by them, depending on different criteria, such as social engagement, financial and accounting criteria etc. Given the lack of clear regulations in this respect, it is up to the companies the amount of information publicly provided about this topic, although the benefits of social responsibility have an important impact on the intellectual capital and its components. In this context, accounting helps stakeholders by proposing a valuation model of intellectual capital, based on accounting figures. This financial assessment of intellectual capital, although very useful, is limited and not sufficient in reflecting the image of a company in public reports. This paper aims to present intellectual capital reporting valences, its two sides, financial (which includes the performance of the intellectual capital) and non-financial, including scoring the issues that underline the importance of such reports, from the perspective of the stakeholders and the accountability of the managers in relation to them.

Keywords: intellectual capital, transparency, stakeholders, human capital, intangible assets

JEL Codes: M11, M14, M41

I. The intellectual capital – the 21st century's resource

Bringing in front the intellectual capital in the 21st century companies was a direct consequence of the attitude towards the resources. The theory of resource-based company specifies that company is a collection of material, financial and intellectual resources, the development and the performance of a business being ensured by their use (Neagu 2007: 164). Judging in terms of traditional accounting and directly related to the problem, intellectual capital is generally treated

as intellectual property, plus those unspecified resources, grouped under the specific designation of intangible assets. A composition of intellectual capital is presented as follows:

One is people or *human capital*. We can define human capital as the amount of skills, abilities, talent, knowledge and expertise of employees (Arsene 2010: 158). Another component is what is surrounding people in an organization and that is *structural capital* – all those intangibles left behind, when people go home, internal processes and structures, patents, databases, all documents certifying the know-how of a company. As third part, there are external processes and relations, customer relationships and company's image, called *social (relational) capital*.

A closer analysis reveals though the necessity to include in the definition above any type or transformation of any intangible assets which are under some control of an organization and contribute to the general process of creating added value for that organization. So, from this point of view, intellectual capital must be more than pure intellect, but include intellectual action. It is the move from “having” knowledge and skills to “using” them (Swart 2005: 3). The “using” of knowledge implies that relationships (social capital) and intangible assets and processes (structural capital) are needed to transform knowledge, abilities, skills and expertise (which are owned by the employees – human capital) into a product or service that is of value to the firm and its stockholders.

Analyzing the intellectual capital through *the input-process-output relationship*, we may consider that the input is the knowledge, expertise and skills of the employees. This input is transformed by the processes reflected in the structural and social capital (the know-how of a company combined with its image and relationships with the economic and social environment). The output is the added value for the stakeholders and the company itself.

Related to this matter, there are two different discourses of transparency, namely one discourse based on generic reporting versus a second discourse based on management driven information. In other words, one discourse highlights as much information to stakeholders as possible, but seems to be in the process of being substituted by another, which emphasizes reporting what is seen from the perspective of management, namely the “right” information. The value of the product provided by a company for its stakeholders – the information – should be the result of demand and supply. But that does not happen just so, sometimes the offer of information appears to be a response to stakeholders' demand, but it turns out to be a handled one.

II. The need for transparency in companies' reporting

Transparency considers two categories of information: one related to financial aspects of a company's life and one which takes into account the non-financial life of a company, in terms of relations with stakeholders, environment and society as a whole.

Starting from this general view on transparency of public information of a company, we consider some aspects related to the transparency of the information related to the intellectual capital.

In practice, there can be two different opinions: the application of non-financial indicators provides interesting new angles and are of great value to investors, while identifying important performance indicators aims at informing both managers and investors. In the 21st century, we may affirm is a general consensus that by applying many new non-financial measures, e.g. sustainability measures and social responsibilities (Global Reporting Initiative), companies can strengthen their external communications, thereby achieving greater transparency. *The term transparency becomes equivalent to disclosing non-financial information and information relating to the company's value creation.*

A characteristic of all information, not just those related to intellectual capital, the manipulation at the limit of legality actually allows changing the image to promote the enterprise on the market, being considered, to one point, as “creative”. But as in any other case, the demarcation between opportunity and opportunism is sensitive, and the creativity can become fraud.

Development of creative side of the information publicly provided by the companies, driven by gaps in laws and regulations, makes it difficult or even impossible to assessing the actual situation of the company and causes serious degradation in the truth, putting into question both the responsibility of information producers and their level of transparency. The reporting of intellectual capital, not being regulated, imposes questions about the limits of information publicly offered to the stakeholders, in relation to the transparency required by the responsibility of the information producers.

From these specifications, two partial conclusions can be drawn. First, transparency in terms of providing sufficient information for stakeholders in order for them to be able to evaluate the activities of corporations must be directed towards society as a whole. Second, transparency is mobilized as a means and not a goal in itself, because in this case, it is seen as a characteristic of the information publicly offered to the stakeholders. The more complete information is, the better informed are the decisions makers.

Additional, it has been discussed that a dilemma exists between minimizing information asymmetry and the costs of disclosure, both from a cost/benefit perspective, but more importantly also with regard to the sensitivity of the information disclosed (Nielsen and Madsen 2009: 849-851).

III. The relationship between the intellectual capital and the social responsibility: from internal reporting to accountability and transparency

Production and dissemination of information by a firm is nothing but simply the result of human will and consciousness and it is in fact a social phenomenon. For these reasons, it must be characterized by accountability and transparency. Interests of users of information are different, which causes some, such as managers, to intervene in the application of companies' policies and methods so as to be benefited. Then, position occupied by some users is that they have a privileged status in terms of information (the investors or the banks).

Before trying to find a financial value of the intellectual capital, first we propose an internal representation of the three main components, each considered briefly from three different, but connected, points of view: as company's resources – these can be measured and reported ("what there is"), as a representation of how the intellectual capital management system works ("what is done"), and whether the use of intellectual capital is leading to efficient products and services requested by customers ("what should happen") (Brennan and Connell 2000: 206-240). Are the components of intellectual capital increasing the flow of benefits for the company?

Table no 1 Indicators for reporting the three components of intellectual capital

Category	What there is	What is done	What should happen
<i>Human capital</i>	Seniority	Share of employees with development plan	Employee satisfaction and fidelity
	Education	Number of training days per employee	Human resource turnover and other financial ratios
	Value-added per employee	Report between the profit plus pay and the number of employees	Employee competency and abilities; increase of the expertise
	Education costs	Education/training costs	Value per employee
<i>Relational capital</i>	Distribution of turnover on markets/products	Customers per employee	Customer satisfaction; customers' rating Annual sales per customer
	Market share	Company's policy related to customers; Share of	Lost customers, new customers

Category	What there is	What is done	What should happen
		turnover related to existing customers	
	Marketing expenses	Marketing expenses over net turnover Administration costs per marketing	Medium size of customers; medium time of the company-customers relationship; customers database; brand image
<i>Structural capital</i>	Investments in R&D IT investments	Product development time – intellectual assets generation; brands, know-how, licenses; PCs per employees; IT expenses per employee	Quality Low error rate IT literacy
	Organizational culture	Quality improvements Management philosophy	Reputation inside the company and on the market
	Risk management	Corporate governance	Increased level of transparency
	Knowledge-based infrastructure	Laboratories; databases; distribution channels	

Source: Adapted from Brennan and Connell 2000.

As we can see, the columns for what there is and what is done can be publicly presented, in our opinion. But the third column is usually related to internal issues, and the probability for a company to unconditionally present this information is very low. The third column has a strong social component, so we may consider it is a part of corporate social responsibility and all the indicators should be presented in a social report, as part of the non-financial reporting of a company.

Starting from the indicators presented above, we can find connections between the benefits of corporate social responsibility and the main components of the intellectual capital, pointing out the impact on the latter. Thus, the social responsibility can contribute to the increase of company's intangibles and intellectual capital (especially, of human and relational capital) even if in some cases the effects are embedded in the nature of social responsibility and appear not so evident (Table no 2). The disclosure is essential because it signals the value of investment in intangibles, otherwise unrealized by stakeholders. Therefore stakeholders become aware about social responsibility and this enhances the visibility, legitimacy and reputation of the company itself. In this perspective, corporate social activity is a resource that can be leveraged also by an informative disclosure that reinforces the company capabilities to gain a competitive advantage (Emilio Pasetti et al. 2009: 5). In the last few years, the attitude of the companies is opened to transparency in presenting the information about their social attitude and preoccupations.

Table no 2 Corporate Social Responsibility and intellectual capital

Corporate Social Responsibility Benefits	Impact on intellectual capital
Human capital	
Increasing motivation; improvement of skills and competences through training activities	Employee training
Increasing loyalty, employee safety and health, employee benefits; attract qualified personnel	Employee wellness

Corporate Social Responsibility Benefits	Impact on intellectual capital
Structural capital	
Improvement of voluntary disclosure, of quality of processes, and of internal communication system	Management Process
Proactive risk management; increasing the level of company transparency	Corporate governance
Repositioning of brand name; rethinking competitive strategies; management of stakeholders' relationships	Strategy
Changing in corporate culture; improving commitment	Culture
Improvement of environmental R&D activities	R&D
Relational capital	
Improve company reputation (social, financial, etc.)	Brand image
Acquire new clients, increase client loyalty	Customers
Strengthen co-operation, improvement of supplier ethical and social profile and performance	Suppliers
Increasing investors attention, and financial analysts attention, better market trust, access to ethical indices	Financial relationships

Source: Emilio Pasetti et al. 2009.

IV. An accounting model for the financial assessment of intellectual capital

The financial overview of intellectual capital imposes a review of the most common financial reporting, which is represented by the differences, sometimes substantial, between company book values and market values, and of the transparency of the accounting information related to that. Together, these indicate the presence of assets not recognized and measured in company balance-sheets. Usually, the intellectual capital accounts for a substantial proportion of this discrepancy.

At present, companies are not required to report on intellectual capital assets, which leave the traditional accounting system ineffective for measuring the true impact of such intangibles.

If the report of intellectual capital would become mandatory in the explanatory notes to the financial statements, the form of the financial overview of intellectual capital is as follows (Hoogendoorn et.al 1999: 4):

Fair value of the company (A) - The fair value of the tangible and monetary assets, after deduction of debts and provisions (B) - The fair value of the identifiable and separable intangible assets (C) = The fair value of the remaining intellectual capital (D)

This overview is drawn up on the basis of the idea that the value of the intellectual capital equals the difference between the fair value of the company (or the shareholders' value) and the book value of the tangible and financial assets less debts and provisions. In order to realize an accurate valuation of the intellectual capital, which equals the sum of C and D, we take the view that the fair value of the company should be deducted from the fair value of the tangible and monetary assets, less the fair value of the debts and provisions. If, for example, the cost of property would be used instead of the fair value, the difference between fair value and historical cost would improperly be attributed to the valuation of the intellectual capital.

In case of reporting for intellectual capital, the distinction between elements C and D is important for the assessment of the company's financial position by stakeholders. The better a company is able to translate its intellectual capital into identifiable and separable intangible assets, the less dependent the value becomes on future profit expectations: after all, identifiable and separable intangible assets can be traded independently and can therefore generate earnings independently, regardless of movements in the profitability of the organization as a whole.

This accounting model does not pose the problem of transparency, but it answers partially to the information needs of stakeholders, providing information about the aggregate value of

intellectual capital. In this case, we have to mention that, in our opinion, the financial reporting (mainly related to performance indicators calculated in relation to intellectual capital and the valuation model) must combine with a non-financial, social reporting.

V. Conclusions

This paper is an overview of financial and non-financial indicators relating to the intellectual capital, which should be reported by companies, in order for them to answer to informational needs of their stakeholders. The impact of non-financial reporting of intellectual capital, as part of the corporate social responsibility, is a strong argument in this direction. Of course, the reporting may include a way to commensurate it using the accounting data.

Yet, regardless of the nature of information, for it to be included in external reports, it imposes restrictions: the question of which level of aggregation of information can still provide meaningful and useful information for the stakeholders. A financial amount is enough or it must be completed by non-financial aspects, which determined that amount? The question of whether information included in reviews intended for internal corporate control, in the form of performance indicators, qualifies for publication in external reports must also be answered. Clearly, confidential information and information of strategic importance to competitors cannot be disclosed, despite the fact that stakeholders are seen as privileged users. This last point poses the problem of transparency. *Where the confidentiality ends and transparency starts? Because, in the case of intellectual capital, transparency is not regulated, it became a matter of responsibility and professional reasoning of the management?*

Arguing the need for transparency in financial and non-financial reporting of intellectual capital is defining in presenting a company as a sum of tangible and intangible resources. Limiting the transparency and awareness of users can affect the quality of decisions and their degree of confidence in decision making. Promoting this concept and its influence on the materiality of disclosed information can improve the quality of financial and non-financial reporting of economic entities.

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THE BUDGETARY POLITICS ON THE MANAGEMENT OF THE PUBLIC RESOURCES THROUGH THE STATE TREASURY

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The birth of State Treasury facilitated the creation of better conditions and possibilities for the organization of cash register execution accountancy of consolidated general budget components, especially regarding the watching over collecting incomes, a better control on payments and also to increase effectiveness and the accuracy of received information. The treasury must become a leading institution on the financial line, through which it can administrate and manage the public funds better.

Keywords: State Treasury, public institutions, public resources, consolidated general budget, budgetary execution

JEL Classification: M41

1. Introduction

The concept of public treasury is an old concept, having its genealogy in antiquity, when, in order to fulfill diversified public needs, there were formed and administrated funds within special institutions and these institutions have become with time what we call today treasury.

Public treasury, as a concept and trends in its evolution regarding organization, running and attributions in different phases of its history, has closely followed the development course of the social-economical society. That is why, the level of development and the complexity of financial operations that are performed by the public treasuries in different countries of the world depend, overwhelmingly, on the level of development for that country's economy, the ratio of state's intervention in that economy and the abundance or the poorness of resources in public finances that they have to manage.

The organization of State Treasury in Romania, starting in 1993, was based on the background of profound transformations in political, economical and social layouts, determined by the transition of Romanian economy towards the competitive market economy.

According to Government Emergency Ordinance no 146 from November 2002, State Treasury is defined as being "an unitary and integrated system through which the state assures the execution of collections and payments regarding public funds, including the ones regarding public debt, and for other operations of the state, in safety conditions in accordance with the effectual legal dispositions".

In modern economy, respecting the autonomy and organizational unification principles, and the liability of operations through the detachment of rights and responsibilities for credit's sequencers and the accountants, during the process of diversifying the function and attributions of the Treasury, the state has entrusted to it duties and particular actions regarding its intervention in economy.

According to Ordinance no 1235 from September 19th 2003, "public institutions, regardless the financing and subordination, performs the operations of collections and payments through State Treasury units where they are fiscally registered". Accordingly, for local and central public

institutions, the State Treasury effectuates operations of offsets with and without cash in case of constitution and use of public resources.

In practicing these basic attributions, State Treasury must ensure a fiscal and operative control on collecting incomes and a precautionary control regarding the abidance of payments disposed by credit's sequencers, in the limits imposed by legal stipulations and according to the destinations approved within each budget.

Considering the main characteristics of fiscal-budgetary politics that are subordinated to the objectives of sustaining the growing of the economy and of reducing the inflation, aligning us to the opinions and recommendations of the European Commission, but also to the rating agencies appeared along with the seasonal evaluations, regarding the reducing of budgetary expenses, hence it results that, for avoiding the noted risks and, implicit the risk of starting the procedure of excessive deficit, it is necessary the embracement of a policy of limiting budgetary expenses and a more careful approach of the budgetary deficit, in consideration of the fact that these elements regard the public's general interest.

In these conditions, State Treasury is called to exercise one of its functions, that of administrator of public funds, function that assumes that all public financial resources to be collected, centralized and used through this financial institution, under a strict supervision and control.

2. The functions of State Treasury

This function assumes that, permanently and at any time of the year, the report between collecting funds, on one hand, and the use of these under the form of cash payments on the other hand, to have a greater value, or in the worst case to be equal. In case that the degree of collecting public funds don't cover the payments and these are urgent, the treasury is obliged, invariable, to contract public loans without having the necessary rest, in many cases, to choose the most convenient version regarding the „cost” of this operation (rate of interest). Maintaining a suitable report in favour of collecting public funds is a real difficult problem during a construction of a budget with deficit, reason for which the public Treasury is obliged, almost permanently, to borrow funds for short term from the money market and for medium or long term from the financial market. In other words, the accomplishment of this function obliges the public Treasury to, on the ensemble of the circuit, the outcomes of funds for each action to be covered, compensated at any times with the entrances of funds, no matter their provenience: collection from taxes and fees, credit loans/bank loans (Central Bank), cash of its correspondents, internal or external public loans. To this end, the public Treasury must always „keep up”, from the point of view of funds' constitution, with the rhythm of effectuating the payments that have a greater regularity then collections.

Therewith, the State Treasury ensures the total correlation of incomes and expenses with the budget to whom they belong, which dictates that the collected incomes to be totally infused in the budget where they belong and the expenses, also, in their entirety to be supported by the budget where they have been prefigured, the general rule being that an expense can be financed by only one budget. Also, the credit sequences to not make payments directly from the incomes in order to not eliminate the possibility of fiscal control on collecting incomes and the preventive control on making the payments through the compulsoriness of registering entirely the collections and payments. This principle is not working properly in the case of special funds budgets and own incomes of public institution, being able to make expenses only after there have been previously constituted the necessary funds.

Regarding the collections of income, especially the making of payments from the budget must always be done only with the respecting of legal stipulations, the treasury's units wouldn't release the sums unless there were respected all the procedures regarding the commitment, liquidation and the ordering of the sums. The budgetary expenses have a precise and limited

destination and they are determined by the authorization contained in the specific laws and in the yearly budgetary laws. Also, no expense can be included in public budgets, nor committed or made by these budgets if there is no legal base for that certain expense.

Regarding the making of the payments, the public institutions, regardless of their financing system and subordination are obliged to present to the State Treasury where they have opened the accounts, the approved income and expenses budget, distributed in trimesters under law conditions.

In deducting the sums cash or through transfer from the public institution's accounts for effectuating the expenses, State Treasury units verify the existence of income and expenses budget for that certain institution and the list of investments, approved under law condition, following the honoring of open or divided budgetary credits limits or of the funds availability, as is by case, and their destination, like some other objectives settled through methodological norms by the Ministry of Public Finances.

3. The features of fiscal policy

Taking into account the current international context, the main features of fiscal policy in the period ahead, which will be subordinated to the objectives of sustaining economic growth and reduce inflation and achieve a budget deficit at a level correlated with macroeconomic objectives, regarding to the opinions and recommendations of European Commission and international financial organizations, regarding the reducing of public expenses for the purpose of diminishing current administration expenditures and the priority allocation of the resources towards projects with multiplying effect in economy that represents the main way of limiting the economical decrease rhythm and for partial compensation of activity reduction from the private sector, for maintaining the budgetary balances, there are necessary some measures meant to reduce the volume of budgetary expenditures to a level that permits the honoring of internal and international commitments assumed by Romania's Government, including the ones regarding the level of budgetary deficit.

According to Government Emergency Ordinance no 34/2009, the authorities and public institutions are prohibited from purchasing, leasing or rental of:

- cars, as defined in par. (1) of art. 3 of Government Emergency Ordinance no. 109/2005 regarding road transport, approved with amendments by Law no. 102/2006, with later changes and completion.
- Furniture and office equipment, as provided in subgroup 3.1 "Furniture" and 3.2. "Office equipment" in Group 3 "furniture, office equipment, protective systems of human values and materials and other tangible assets" of the Government Decision no. 2.139/2004 for approving the Catalogue regarding classification and the useful life of fixed assets, as amended, and the nature of their inventory intended to equip the office space.

Ensuring supply needs will be possible only through redeployment of the same institution or other public institutions.

Exceptions to the above stipulations:

- new public authorities and institutions established after the effective date of this ordinance, only in the first year of operation, if they do not come from the restructuring and / or reorganization of public institutions already existent;
- acquisitions for projects financed by loans, foreign funds grants and related mutual financing and previous financing funds and funds from donations and sponsorships;
- investment objectives implemented after the effective date of this ordinance, provided that in the general estimate of the work has been provided as an initial endowment;

- renting cars by the Ministry of Foreign Affairs for ensuring the logistics necessary to the organization of foreign politics events, only in the situation that the vehicles from the institution park do not correspond to the objectives that must be accomplished.

Also, the payment of the invoices representing the value of purchased goods, performed services or effectuated works is made by the public institutions between 24-31 of each month.

In order to carry out the equilibrium conditions of public sector expenditures, the public institutions have the obligation to program its payments through transfer or cash, (according to the methodological norms approved by order of the Minister of Public Finance). Within three months from the date of entry into force of this ordinance, the payment terms associated with the closed legal commitments are correlated with the payment terms set out above.

Although the making of the payments is in the credit's sequencer's responsibility, treasuries operative bodies are obliged to exercise preventively a financial control on these, meaning they can not accept for pay the payment orders that have as object of payment material expenses forbidden to be made in the Government Emergency Ordinance 34/2009. Also, if the public institutions don't have forecasted the payments according to the valid legislation, or if the payments representing material expenses are realized until 24 of each month, these are rejected from payment from the operative treasury.

The way these measurements are applied and respected by the public institution is the responsibility of State Treasury units, these being called to ensure the proper compliance of the measures taken by the Government.

In case of failure for the Government Emergency Ordinance no 34/2009, the Minister of Public Finance is authorized to take the following measures:

- blocking the appropriations of budgetary credits for the main credit sequencers of state's budget, the budget of state's social insurance, the budget of unemployment insurance, the budget of single national fund health insurance and local budgets;
- the blocking of accounts opened of behalf of State Treasury units of public institutions funded partially or totally from their own income;
- in case of not honoring the term of payment or the announced graphic of payments, the Minister of Public Finance reserves the right of removing from deduction the unannounced sums, and the responsibility for not deducting the order of payments presented to the territorial units of State Treasury is totally of the credit sequencers.

Considering the big volume of remaining payments registered by the administrative-territorial units towards the economic operators that perform services and works of locally public interest, also the debts that these register towards the state's budget, the budget of state's social insurance and the budget of special funds and also the stipulations of the stand-by arrangement between Romania and the International Monetary Fund regarding the remaining payments, that all these aspects target the public interest and constitutes extraordinary and emergency situations whose regulation can not be postponed, according to the Emergency Ordinance no 51/2010. In the year 2010, the Minister of Public Finances grants to the administrative-territorial units loans from incomes obtained through privatization, registered in the general current account of State Treasury, with an interest of 6,25%, with a reimbursement term of maximum 5 years, with a grace period of one year to pay outstanding liabilities recorded by them on December 31, 2009 towards the economic operators that are suppliers of goods, services and works, including towards the economic operators that performs the public service of producing, transportation and distribution of heat in centralized system, outstanding at the date of requesting the loan. The period of granting the loan is settled in the loan conventions closed with the administrative-territorial units.

The sums granted to the administrative-territorial units on loan from the proceeds from privatization will be used exclusively for:

- to settle outstanding tax obligations of economic operators, suppliers of goods, services or works of administrative-territorial units, including public service operators providing generation, transmission and distribution of heat in a centralized system;
- to settle outstanding tax obligations of economic operators who have outstanding amounts of receivable sums from the public service operators providing generation, transmission and distribution of heat in a centralized system.

For requesting the loan from the Ministry of Public Finances, the administrative-territorial unit, through the main credit sequencer, prepares the application for requesting granting a loan from privatization incomes in accordance with the stipulations of Government Emergency Ordinance no. 51/2010, to which they attach the list of economic operators whose remaining obligations are extinguished within the requested loan and the copy of the local or county council resolution, by case, in which is approved the contract of the loan from privatization incomes registered in the general current account of State Treasury, stamped and signed, in accordance with the original.

The value of the loan requested by the administrative-territorial unit can not overcome the value of the smallest from the total of the obligations of outstanding payments registered by this on December 31, 2009 towards the economic operators providers of goods, services and works, including towards the economic operators that perform the service of providing, transportation and distribution of heat in centralized system, outstanding at the date of requesting the loan, and the total of outstanding tax obligations.

The sums granted as loan to the administrative-territorial units are transferred by the Ministry of Public Finance, from the incomes of privatization registered in the current general account of State Treasury, in account 50.02.44 “ Available from loans granted from incomes of privatization according to Government Emergency Ordinance no 51/2010”, opened at the territorial units of National Tax Administration Agency will communicate electronically to the competent tax authorities the list of economic operators suppliers of goods, services and works for the public service of providing, transportation and distribution of heat in centralized system and for the economic operators that have to receive outstanding sums from these ones, under their administration and also the allocated sums for the administrative-territorial units with the purpose of extinguishing the tax obligations registered by them.

The competent fiscal body, through the service/department responsible for analytical evidence per payers, prepares the transfer notes of sums destined for extinguishing these obligations and sends them to the units of operative treasury.

The units of State Treasury have the obligation that within 5 days from receiving transfer notes send by tax authorities, to transfer the sums destined for the extinguishing of tax obligations from account 50.02.44 “Available from loans granted from privatization incomes according to Government Emergency Ordinance no 51/2010” in accounts of proper budgetary incomes, opened on fiscal identity codes of economic operators suppliers of goods, services and works of administrative-territorial units and respectively, of economic operators that performs public service of providing, transportation and distribution of heat in centralized system.

Also, the sums received in the account 50.70.34 “Available of economic operators from collected sums according to art 4, par. (2) from Government Emergency Ordinance no 51/2010” are transferred by the State Treasury units within 5 days from receiving the transfer notes made by tax authorities in accounts of budgetary incomes opened on fiscal identity codes of economic operators suppliers of goods, services and works of economic operators who perform the public service of providing, transport and distribution of heat in centralized system.

The above operations will be made by State Treasury units only if the sums included in the transfer notes are equal or inferior to those communicated in electronically system by the General Direction of Treasury and Public Accountancy. Contrary, the transfer notes will be refunded to the tax authorities for making the necessary corrections.

For the performed operations, State Treasury units issue statements for accountant holders, to which they will attach copies of the transfer notes made by tax authorities, afferent for the extinguishing operations of tax debt.

Another measure took by Romania's Government to restore budget balance is to reduce the wages of the staff of public institutions, according to Law 118/2010 with 25%. The sums resulted from the decrease with 25% of the gross amount of salary rights is transferred by the employers in the accounts of incomes of state's budget 20.36.01.20 "State's budget incomes - Payments from reducing the wages according to Law no. 118/2010", opened to the units of State Treasury in the area where employers are taking the tax records. The sums are transferred to the state's budget and then it is declared to the competent tax authority, by completing and filing Form 100 "Statement on payment obligations to the state budget", until 25 of next month following that for which it shall pay the salary.

4. Conclusions

Through the Treasury, the Ministry of Public Finances disposes of specific analysis instruments in all the steps of elaborating, approving and implementing the state's budget, the budget of social state insurances and the local budget in order to maintain the financial, monetary, currency balance overall, and proper management of internal and external public debt of the state. Through this system there have been created the necessary conditions that the competent state authority to oversee the establishment of public financial resources and their use in the purpose for which they were assigned.

The public treasury can be considered a state service that ensures the great monetary and financial balances of the state, through the cash , banking and public accountancy operations, and also through its work of guardianship, funding and boost the economic and financial field.

It should be brought to attention the activity of numerous anonymous public clerks that activate in the units of State Treasury, which, because of their personal responsibilities, bring up a very effective defense wall if not against abuses of all kinds, at least against diversion and theft of public funds. In the exercise of authorities, they watch over the integrity of public funds, their function remaining one of the most important wheels of state.

As it is mentioned in his work "La direction du Tresor", the French author, Francois Eck, the general treasurer-cashier, helped by history-stratified administration, devoted to public service, preoccupied with competence and discipline, copes with missions that request a very high degree of effectiveness and takes responsibility of the function of repressed financial circuits of the state, of local communities and public institutions.

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8. ORDER No 1235/2003 for approving the Methodological Norms of implementing the stipulations of Government Emergency Ordinance no 146/2002 regarding the formation and use of resources performed through state treasury, applied with changes through Law no 201/2003.

CORPORATE GOVERNANCE—THE ROLE AND APPLICATION OF THE PRINCIPLE OF TRANSPARENCY

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The aim of the current research is to clarify the concept of ‘corporate governance’ as we believe it is a relatively new concept at national level. At the same time, our analysis focused on the manner in which the principle of transparency has been incorporated into the recommendations and regulations/provisions of the Bucharest Stock Exchange (Romanian: BVB) and how this principle has been applied by the companies listed with the BVB. In order to accomplish the objectives of our research, we adopted a deductive approach, from general to specific, by means of which we were able to combine qualitative with quantitative studies. Therefore, our approach started from the definition found within the principles of OECD according to which ‘corporate governance’ is the system by which companies are run and controlled. In Romania, the concept of ‘corporate governance’ was first advanced in 1999 by the Strategic Alliance of the Business Associations (Romanian: ASAA), which drew up a “Voluntary code of corporate governance” in association with the Confederation of Private Entrepreneurs in Timiş county and the Chamber of Commerce and Industry of Romania and Bucharest. Another facet of our research is the principle of transparency and the manner in which entities should put it to practice in order to ensure efficient corporate governance. To this effect, since the beginning of 2009 the entities listed with the BVB have been under obligation to report which recommendations of the new Corporate Governance Code have actually been implemented by the company in the current financial year by disclosing to BVB the “Comply or Explain” Statement. The findings of our research show that the concept of ‘corporate governance’ has lately been a matter for intense debate due to the famous financial failures in recent years. In 2009, Transelectrica was the only company in tier I of the BVB which filled in and submitted the “Comply or Explain” Statement. Therefore, we believe that Transelectrica should serve as a fine example for the entities listed with the BVB as regards the filling in and submitting of the said Statement.

Keywords: corporate governance, transparency, efficiency, recommendations, regulations M42, M48

1. Introduction

As framework for the operation of the external audit, corporate governance has been conceptually analyzed starting from the universally acknowledged definition found in the principles of OECD, then in terms of its attributes by taking into account its underlying principles. Therefore, we believe that efficiency may be a defining attribute for corporate governance on condition that all recommendations and principles of OECD issued in this regard are strictly followed. Our purpose has been to deal at great length with the principle of transparency, as it is closely related to the topic being researched. To this effect, we studied the manner in which the principle of transparency has been incorporated into the recommendations and regulations of the BVB. In order to conclude our theoretical study we analyzed the manner in which this principle is applied by the Romanian societies/companies listed with BVB in tier I, and then we made a detailed presentation of an example of good practice and conducted a case study focused on Transelectrica society.

In the final part of our scientific endeavour we present the main conclusions which highlight the findings of the research conducted.

2. Research methodology

In order to accomplish the objectives of our research, our scientific endeavour adopted a deductive approach, from general to specific, which combines qualitative with quantitative studies. The starting point of our research is based on the current level of knowledge of the key concept „corporate governance”.

The concept of governance has been approached in terms of the Principles of Corporate Governance issued by OECD as well as the degree to which these principles have been incorporated at national level and the role they play in developing efficient corporate governance. Going from synthesis to analysis, we continued by stressing the importance of observing the principle of transparency and conducted a case study about the observance of the said principle by the Romanian entities.

In conducting our case study on the practices of efficient corporate governance adopted by the societies listed with the Bucharest Stock Exchange, we made use of the non-participant observation method which, according to Krüger (1988), gives a series of advantages because the information can be obtained easily and at little expense when the respondents are not willing to impart it. Thus, we were able to obtain in-depth, direct information which has not been processed or interpreted.

3. Defining the concept of corporate governance

The concept of corporate governance was first introduced in 1999 by the Organization for Economic Co-operation and Development (OECD). OECD defines ‘corporate governance’ as the system by which companies are run and controlled as well as the manner in which liabilities and rights are shared by the main actors (shareholders) of an entity. Of these, OECD mentions the Board of Directors, who has a substantial decision-making role to play in a company, followed by managers, shareholders and other stakeholders. In order to support entities to apply the principles of corporate governance, OECD published a guide to corporate governance describing the principles underlying an efficient corporate governance.

The OECD principles describe the manner in which decisions should be taken within an entity, starting from the definition of the strategic objectives, the proper means to achieve them and the monitoring of the financial performance. Managers occupy the leading role in bringing more efficiency to the corporate governance. Therefore, a good corporate governance must provide managers with adequate incentives in order to motivate them to run the entity properly and pursue the accomplishment of the entity’s and shareholders’ objectives (OECD, 2004).

The concept of corporate governance could be well summarized as being a set of processes, customs, policies, laws and institutions affecting the way an entity is administered and controlled, with a view to increasing its performance and value. It actually refers to enhancing the efficiency of the management systems, with special emphasis on the role of the Board of Directors, the responsibility and remuneration of its members, the credibility of the financial situation/standing and the efficiency of the risk management systems.

In Romania, the concept of corporate governance was first advanced in 1999 by the Strategic Alliance of the Business Associations (Romanian: ASAA), which drew up a “Voluntary code of corporate governance” in association with the Confederation of Private Entrepreneurs in Timiș county and the Chamber of Commerce and Industry of Romania and Bucharest. The Code’s purpose is to draw the attention of the business environments, the Boards of Directors and CEOs of the incorporated enterprises to the experience of the OECD countries and the principles they adopted in the field of corporate governance.

On the other hand, the Bucharest Stock Exchange is actively engaged in promoting the principles of corporate governance issued by the OECD. One of the first steps in this regard was the establishment in 2001 of a Corporate Governance Code which the entities trading on the market of the BVB should apply in whole or in part. In 2008, the Code was amended in order to be harmonized with the principles of corporate governance issued by OECD. The Code, taking effect from the beginning of 2009, contains certain recommendations on the transparency of the obligation toward the BVB and investors to submit the Annual Report. The Code contains 11 articles structured by the principles of OECD. One or more of the 19 principles are explained in each article and for each principle the Code elaborates recommendations for its application so that the Code comprises a total of 41 recommendations. In order to help the issuers apply the recommendations of the Code, in March 2010 the Bucharest Stock Exchange published 'Implementation Guidelines for the Corporate Governance Code' which provides details on the implementation of certain recommendations.

4. Efficient corporate governance

It is necessary to strictly observe each and every principle so that corporate governance may properly be termed "efficient".

a) The role of observing the principle of transparency in developing efficient corporate governance.

Below we shall deal exclusively with the principle of transparency and the manner in which the entities must put it to practice to ensure efficient corporate governance, as the said principle is directly related to the purpose of our research.

An important role within corporate governance is occupied by the transparent information of shareholders and other stakeholder categories. In order to build up their trust in the financial and non-financial information provided by the entity, the information must be audited. As the financial auditor is an independent professional whose activity is carried out in the public interest, his opinion expressed in the audit report contributes to the increase of all stakeholders' trust in the accuracy of information provided by the entity.

The range of reports made up of balance sheet, profit and loss account, cash flow, capital inflow and outflow along with guidance notes and accounting policies are the main financial information provided to stakeholders.

The data contained in the range of financial reports are the product of accounting at organizational level and of the external reporting systems, which provide data on the entities' financial standing and performance.

In order to observe the principle of transparent information/informing of all stakeholders, equal importance must be attached to financial and non-financial information. This requirement is also emphasized in the study conducted by the McKinsey (2001) consultancy firm regarding the opinion of institutional investors from emergent countries (Asia, Southeastern Europe and Latin America) about corporate governance. The study shows that, when taking investment decisions, investors attach equal, if not more, importance to non-financial information on corporate governance as they do to financial information (Robu et.al., 2004).

Providing transparent information may contribute to efficient corporate governance through the improvement of the quality of information. The demand for information on the part of investors, financiers and financial analysts has increased considerably over the last years, as did the competition. This aspect, in corroboration with the international financial scandals, required that entities pay increased attention to the quality of information provided, especially in the case of listed companies, as well as the active involvement of security regulators and international accounting bodies.

As shown in the studies conducted by DeZoort et al., (2002) and Porter (2009), at entity level an important role in observing the principle of transparency for the information provided is occupied by the triad internal audit—audit committee—external audit.

Taking these aspects into consideration, the Corporate Governance Code issued by the BVB deals with transparency, financial reporting, internal control and risk management within the same article, that is, Article 7.

b) Incorporation of the principle of transparency in the BVB's recommendations and regulations

Starting with 2009, the entities trading on the BVB market are under obligation to report which recommendations of the new Corporate Governance Code have been concretely implemented during the current financial year by submitting the “Comply or Explain” Statement.

In the “Comply or Explain” Statement, a set of questions were framed for each principle, concerning which recommendations should be adopted. Of the total number of recommendations published in the Code, the Statement only took 28 of them, framed as questions which can be answered by YES, NO and IF NOT, PLEASE EXPLAIN. The recommendations taken in the Statement focus on the following aspects: definite transparency structures, recommendations on the respect for and active and effective communication with stakeholders, choosing, structure and efficiency of the Board of Directors, establishment of the nomination committee, remuneration of the Board of Directors and various committees and governance structures, the protection of the entity's interests and not somebody's personal interests.

The recommendations which were not directly taken into the “Comply or Explain” Statement complete and provide details about those explicitly found in the Statement. In order to give an overall picture, below we specify those recommendations that were not taken in the Statement: participation of shareholders to the Shareholders General Meetings as well as using the best efforts to facilitate their participation, recommendation on the privilege-based transaction, responsibility and the balanced social structure of the Board of Directors, forwarding the list with the candidates to the office of administrator/director, coordination, appointing and evaluation of the members of the Board of Directors by the Nomination Council/Committee, if any, submitting to the Board of Directors the proposals on remuneration drafted by the Remuneration Council, if any, and last but not least, the modifications regarding the new management system (adopting the dualist system) and the application of the governance codes.

5. Transelectrica case study on the application of the principle of transparency by the Romanian societies

After we analyzed the annual reports of the 21 entities listed with the BVB in tier I, we found out, to our great disappointment, that only one of the 21 entities submitted the “Comply or Explain” Statement for 2009. Transelectrica is the only entity which disclosed to BVB the “Comply or Explain” Statement for 2009 in the Annual Report of Directors.

From the statement made by Transelectrica “Although the ‘Comply or Explain’ Statement is not compulsory for the current Annual Report, the company has decided to submit it as a token of respect for shareholders and investors” we can notice their keen interest in the corporate governance as well as in the participants to the capital market. The analysis of the statement filled in by the entity reveals a small number of negative answers (9) out of the 28 recommendations. Some negative answers were given for Principle XI “*The company will secure the services of good quality directors and executive managers by means of a suitable remuneration policy that is compatible with the long-term interests of the company*”. Of the negative answers, we would like to present the one given to the question “*Does the Board of Directors analyze at least once a year the need to register a remuneration Committee/policy for the directors and members of the executive management?*”. According to the negative answer provided, the company complies with the requirements of the Statement and offers a plausible explanation “*Not applicable. The*

Remuneration Committee was set up as of 2007”, which proves the entity’s interest in adopting the principles of corporate governance. The answer to the recommendation on the company’s remuneration policy is also negative, the explanation being *“Applicable legal provisions and decision of the majority shareholder are enforced”*. This explanation is offered for most of the negative answers.

Although one third of the answers provided by Transelectrica are negative, we would like to also pinpoint the great number of positive answers. Thus, the entity provides positive answers to two thirds of the questions framed according to the recommendations of the BVB’s Corporate Governance Code. Mention must be made of the fact that explanations are also provided in the case of some recommendations for which the entity gives positive answers, thus giving further details about that particular answer. The first explanation given for one of the positive answers was indeed enjoyable to read *“Are the corporate governance structures, positions, competences and liabilities of the Administration Board and of executive management defined in the Corporate governance best practices/regulation? These are defined in the Transelectrica Corporate Governance Regulation as well as in the supporting documents published”* because we could see the entity’s interest in obtaining information and in elaborating corporate governance regulations. Another positive answer whose explanation was worthy to notice is the one related to the audit committees *“Is there an Audit Committee within the company? The Audit Committee was set up as of 2007. Update of appointment currently in progress”* thus proving that the audit committees were set up on the initiative of the company and not under any legal constraints.

6. Conclusions

Our research focused on corporate governance, a topic of intense debate over the last years due to the failure of some famous international companies. One can develop efficient corporate governance only if all OECD principles in this regard are observed. Our research focused mainly on the manner in which the principle of transparency must be put to practice in order to ensure efficient corporate governance. To this effect, we studied the manner in which the principle of transparency has been incorporated into the recommendations and regulations of the BVB. In order to conclude our theoretical study we analyzed the manner in which this principle is applied by the Romanian societies/companies listed with BVB in tier I, and then we made a detailed presentation of an example of good practice and conducted a case study focused on Transelectrica society. By filling in and submitting the “Comply or Explain” Statement, we believe that Transelectrica should serve as a fine example for the entities listed with the Bucharest Stock Exchange. This Statement is a good means to provide the shareholders and potential investors with information on the structure and organization of the entity.

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PREFERENCE OF THE LISTED ENTITIES REGARDING THE SELECTION OF THE EXTERNAL AUDITOR

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The present research aims to highlight the importance of the external auditing in supporting corporate governance and the preference of the listed entities to be audited by the big audit companies. Given the proposed objectives of the research, our scientific method is based on a deductive approach from general to particular that combines quantitative and qualitative studies. The role of the external audit was analyzed by conducting a study of literature on two levels: a theoretical–conceptual level in terms of economic theories and an empirical-practical level based on literature from which we extracted through a content analysis the defining elements of the audit work quality. Falling within the scope of the study, we evaluated the preference of the listed entities to be audited by the Big Four. To this end we used the content analysis of the publicly posted audit reports for the period 2005-2009. Our research results show that although we are a country with an emerging capital market development, the entities in the I-st category on the Bucharest Stock Exchange tend to an audit conducted by one of the big audit companies. Another result arising from our study is that the entities of the I-st category on the Bucharest Stock Exchange become more transparent from a year to another. Whether for the year 2005 we find only 12 audit reports publicly posted, in 2007 we can find 21 audit reports publicly posted. The trend of the large entities audited shows that the preference of the entities to be audited by one of the Big Four is higher from a year to another. The preparation of the financial statements and their audit must be done according to regulations for the currently period. The presumption found in the literature according to which the large entities are audited by the big audit companies which provide higher audit quality is confirmed in the case of our national country as well.

*Keywords: external audit, audit report, opinion, listed companies, Big Four
M42, M48*

1.Introduction

One of the prevalent ideas in the literature supports the preference of the large entities to be audited by the big audit firms, and the most common argument to support this preference is the quality of their audit services (Moizer 1997, Francis 2004, and Barton 2005).

Starting from this hypothesis we wanted to study its validity on the Romanian capital market and we studied whether this preference also applies to the entities listed on the I-st category of the BSE, knowing the fact that Romania is an emerging country and its market capital is being developed. According to the analysis we can conclude that Romanian entities listed on the BSE follow the same preference as the companies listed on international markets.

In the Regulation no.1/2006 regarding the issuers and securities transactions the art.b227-(1) states that the companies admitted to trading on a regulated market will prepare, will make available to the public and send to CNVM and to the market operator their quarterly, biannual and annual financial reports accompanied by the full comments (Regulation no.1/2006, Title IV, Chapter III). The auditor's report deals with both the consolidated and individual financial statements. The annual report is made publicly available in writing, on request, and in electronic form on the website of the issuer. Annual reports remain available to the public at least for five years.

The paper is structured in three sections. In the first section is presented the actual stage of knowledge regarding the role of the external audit. This objective is achieved through a theoretical and conceptual approach on the role of audit, followed by a practical and empirical approach. In this approach we focused our attention on the quality of the services offered by the audit firms. In the second section we made a case study on the entities pertaining to the I-st category of BSE, through which we want to reflect the preference of the large entities to be audited by a big audit company. The third section of the paper contains the conclusions of our study.

2. Research methodology

Our study refers to the listed entities as they are prone to voluntarily apply the Code of Corporate Governance and thus the audit requirements regarding the transparency of the financial and non-financial statements. We analyzed only the audit reports of the individual financial statements as they can be found on the Bucharest Stock Exchange in greater numbers than those consolidated.

We analyzed the reports from 2005 to 2009, because only for this period we could find the complete information posted on the CNVM in order to compare it with data found on the websites of companies or on the BSE website.

In order to conduct the case study we used a deductive approach, through a content analysis of the audit reports publicly posted on the website of the Stock Exchange, National Securities Commission or on the entity's website. To reach that goal we followed the next steps: we analyzed the regulations concerning the preparation of the audit reports and the financial statements, we selected the necessary dates from the audit reports, and we selected the entities to be analyzed. Then we collected the information, we defined the analysis methodology, we made the proper analysis and, at the end, we interpreted the obtained results. The data analysis was made with the statistical program SPSS 16.

3. Actual stage of knowledge regarding the role of the external audit in corporate governance

Theoretical and conceptual approach

External audit has an undeniable role when stakeholders or interested third parties may trust the financial information provided by an entity. The auditor is the specialist that, through his opinion, confirms the fidelity/accuracy/reality of the financial statements, as they are legally able to verify such data. When the audit report contains an unqualified opinion, the users of the financial statements offer a deeply trust in the accuracy of the financial information.

Motivational theory

The motivational theory explains the audit process through a superior qualitative professional judgment of those who bear responsibility for the preparation and presentation of the financial statements to be audited (Dobroțeanu and Dobroțeanu 2002, Ball 2003, Woodbine and Gordon

2010). Moreover, the motivational theory considers that the audit process must be performed by the best prepared professionals which occupy the superior level position including the responsibility for expressing their opinions.

Agency theory

Agency theory developed by Berle and Means (1932) leads to the dissociation of the administration and control department. As stated Jensen and Meckling (1976) the principal which is not a shareholder is interested on his personal benefits and not on the interests of the shareholders. Thus, "the company is a legal fiction which serves as a focal point for a complex process in which conflicts between individuals are resolved by implementing a network of contractual relationship" (Jensen and Meckling, 1976).

Insurance theory

Insurance theory is based on two principles: the principle of ensuring according to which the audited information has a certain degree of assurance and the principle of information according to which the investors, managers have greater confidence in the audited information when making their decision. The importance of the financial audit explained by the theory of insurance, reduce the risk of presenting incorrect information. Information risk differs from the risk of business bankruptcy, although the information was properly presented. Business risk may occur as a result of events that cannot be anticipated.

Using financial statements may incur loss due to misstatements. The probability of recovery the loss becomes higher when the company has an auditor and is directly proportional to the size and reputation of the auditor. Important auditors, so-called "deep pockets" assure investors against the consequences of inaccurate financial statements (Simunic and Stein, 1995).

Theory of interested parties (stakeholders)

Individualistic approach of the economic, financial and political interdependences from nowadays when speaking of globalization, no longer finds relevance, so far the model becomes complex and the theory of stakeholders (theory) meets the information needs of all the stakeholders.

Stakeholder theory has gained momentum in 1970, but in 1984 was conducted the first research on stakeholder theory in management. Generally, the theory can be applied to all of the entities, while the management of the entities is required to provide information to all the stakeholders. The theory was also developed in other disciplines (Donaldson and Preston, 1995), given the role of the entities on the capital market which becomes increasingly important.

Practical and empirical approach

A number of researchers which examined the role of the external audit in corporate governance have focused on the study of the audit quality. From the 19th century, many countries have tried to improve the audit quality through regulation, laws or by creating rules regarding the auditor's independence, or regarding the public oversight. All such modifications and improvements have helped to improve the audit quality (Baker et al., 2010). Some of them consider that audit quality can be measured by the risk reduction, by the reputation of the auditors (Brian et al., 2007, Lennox 1999) and others through the power and independence of auditors (Knechel 2000, Herrbach 2001, Lowensohn et al. 2007, Watkins et al., 2004).

Authors such as Moizer (1997), Francis (2004) and Barton (2005) analyzed the quality of the audit and concluded that the quality of the audit service is immeasurable. Thus it remains the duty of auditors to add credibility to the corporate financial reports through their examination and expressing of a true and correct opinion as required in IAPS 1004. The financial statements auditing provides confidence when the users are satisfied with the results of the process.

Francis (2004) supports the idea that audits conducted by one of the Big Four are of a higher quality than those made by an individual auditor. He made an empirical research analysis over

the past 25 years, especially in the United States, to assess the knowledge regarding the audit quality of the listed companies. His conclusions showed that the audit failure rate is low, much less of 1% per year, while the audit fees are quite small, less than 0.1% of the global sales of the customers. All these results show that the audit acceptable level of quality is achieved at low cost. Another finding of the mentioned study shows that the low quality audits in 1990 had a major contribution to the onset of the financial failures, and implicitly as a measure against them, the initiation of recent reforms, such as the elaboration of Sarbanes-Oxley Act 2002 in the U.S. Even though there have developed a series of laws and recommendations, the literature does not define an optimal level of audit quality, so it cannot be answered the question whether the level of audit quality is "too low" or "too high".

We can conclude that it is difficult to determine an optimal level of audit quality, but we also support the idea found in the literature that the audit conducted by one of the biggest firms is higher qualitatively than the audit performed by an individual auditor.

Lennox (1999) considers that the big audit firms are more stringent than the small firms. To demonstrate this statement he makes two assumptions: Hypothesis 1: reputation hypothesis according to which the big auditors have a greater interest in providing high quality services as they don't want to lose their reputation (DeAngelo, 1981) and Hypothesis 2: "deep pockets" hypothesis which mentions that big auditors should be more rigorous, because they have greater experience on the entities with litigation risk. The results show preference on the "deep pockets" hypothesis than on the reputation hypothesis as regards the size of the auditor and the litigation risk.

4. Study regarding the preference of the entities to be audited by one of the Big Four

Through this study we want to test if the hypothesis regarding the big entities' preference to be audited by the big audit companies is confirmed, taking into account that Romania is a country with an emerging capital market development.

The table below presents an overview of the number of companies audited by the Big Four and those audited by the other audit firms.

Tab.1. The number of companies audited by the audit companies

		2005		2006		2007		2008		2009	
		Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Valid	DELOITTE	3	14.3	4	19.0	5	23.8	5	23.8	4	19.0
	KPMG			4	19.0	4	19.0	4	19.0	6	28.6
	ERNST & YOUNG	3	14.3	3	14.3	2	9.5	2	9.5	2	9.5
	PRICE WATERHOUSE COOPERS	0	0	1	4.8	2	9.5	2	9.5	2	9.5
	OTHER	6	28.6	7	33.3	8	31.8	8	38.1	7	33.3
	Total	12	57.1	19	90.5	21	100	21	100	21	100
	Missing System	9		2	9.5	0	0	0	0	0	0
Total		21	100	21	100	21	100	21	100	21	100

Source: projection made by the author

Analysis results

a. General trend of the publication of audit reports

As can be seen in the table above, from a year to another, the numbers of entities that publicly post their audit report increases. In 2005 from 21 entities considered in our analysis only 12 of them publicly posted their audit reports. Later, in 2009, there are 21 entities which made public their audit reports. We also note that in 2005 there were 20 entities listed on the stock market.

The constant increase of the entities that have publicly posted their audit reports and financial statements is a good thing. We consider that the publication of the audit reports and financial statements is a relevant indicator of effective corporate governance. Transparency of the financial

statements and audit reports due to their electronic publication and the unfettered public access represents the premises of effective corporate governance.

b. The number of entities audited by one of the Big Four

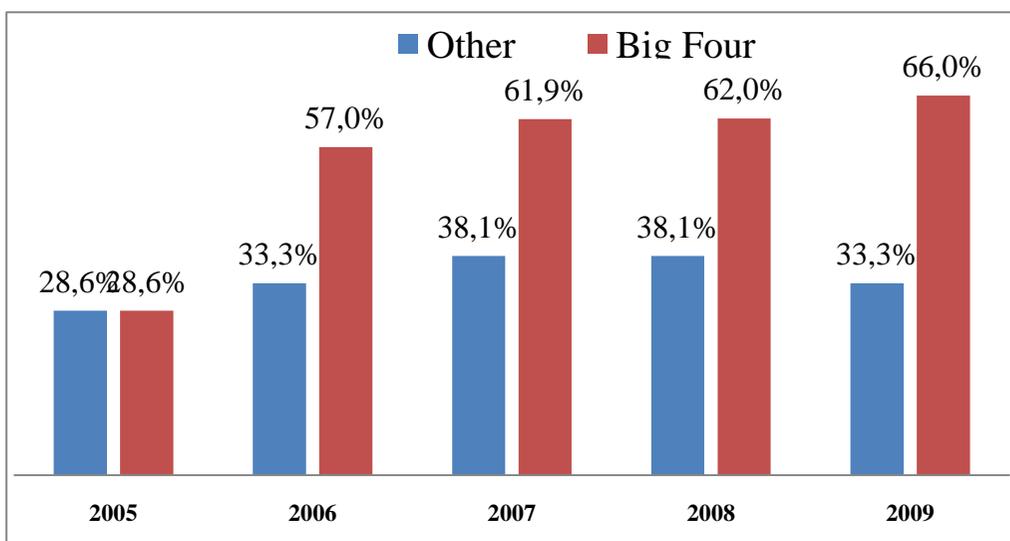
From the above analysis it can be seen the upward trend of the entities audited by one of the Big Four. The explanation of this trend refers to the fact that these companies perform high level of analysis when auditing the financial statements and their knowledge regarding the international accounting and auditing standards is superior.

In 2005 from the 12 entities that have publicly posted their audit report on the website of the BSE, CNVM or on its own website, six of the entities were audited by one of the Big Four audit company. One year later, in December 2006 there are already 12 entities audited by one of the Big Four of a total of 19 entities on the Bucharest Stock Exchange that had their financial statements audited.

c. The popularity of the big audit companies

In order to determine the popularity of the most important audit companies and their evolution over the last five years we have determined the annual total number of the audited entities, followed by the determination of the number of entities audited by one of the Big Four. In the figure below it can be observed the evolution of popularity of the audit firms during 2005-2009.

Fig.1. The popularity of the big audit companies from 2005 to 2009



Source: projection made by the authors

As can be seen in the figure above, even though we are a country with an emerging capital market development, the entities in the I-st category of the Bucharest Stock Exchange tend to an audit conducted by one of the big audit companies. In 2005 half of the entities were audited by one of the big audit companies and the other half by the other audit entities. Moreover, in 2009 the situation shows that from the 21 audit reports of the listed entities 66 % were audited by one of the Big Four.

A first conclusion arising from our study is that the I-st category entities from the Bucharest Stock Exchange become more transparent from a year to another. In 2005 we find only 12 audit reports which were publicly posted, while in 2007 all of the 21 entities electronically published their audit reports.

A second conclusion would be the ascending trend of the entities audited by one of the Big Four. Also the preparation of the financial statements and their auditing is done according to the specific regulations of the current period. Therefore, the evolution of the qualified or unqualified opinion is not constant and has no different upward or downward trend from a year to another. The modification in the auditor's opinion may be due to the fact that auditor changes from year to year, and most often when the auditor changes the opinion issued could be different.

In conclusion, the presumption found in the literature, namely: the big entities are audited by the big audit companies because they provide higher audit quality is also confirmed in the case of the Romanian emerging countries with capital market development.

5. Conclusions

In this paper we approached the external audit role in achieving effective corporate governance from two perspectives: a theoretical-conceptual approach in terms of an economic theory and a practical-empirical approach in terms of specific literature. External audit has an undeniable role on the trust of the stakeholders in the financial information provided by an entity. The auditor is responsible in the issuance of an audit opinion in order to confirm to the interested parties the fidelity/accuracy/reality of the financial statements. The preparation and publication of the standard audit report provides greater confidence in the entity's financial statements and reports.

One of the common ideas in the literature supports the preference of the big entities to be audited by the most important audit firms, as it is considered the superior quality of their audit services. Falling within the scope of our concerns and being strictly related to our research, we investigated whether this preference also applies to the I-st category entities listed on the BSE, knowing the fact that Romania is an emerging country and its capital market it is in a continuous development. At the end of the study we can conclude that Romanian entities listed on the BSE show the same preferences as those listed on the international markets. In addition, on the basis of the collected data we were able to draw several conclusions that define the audit market in Romania with examples on the entities listed on Bucharest Stock Exchange.

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AUDIT EXPECTATION GAP IN THE PUBLIC SECTOR IN ROMANIA

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Theme – It is known that the large public and auditors hold different beliefs about the auditors' duties and responsibilities. In these conditions the audit expectation gap represents that level of expectation that remains uncovered. In this study paper, the audit expectation gap represents the difference between the achievements of public auditors and the expectations that the general public (students) have beyond those responsibilities.

Purpose – The evolution of the audit expectation gap has been examined in various countries, but the extent of the concept has not been investigated so much in the public area. This study attempts to assess the perceptions of possible future auditors, students, regarding the existence of the expectation gap in the public area.

Literature review – A review of the literature identifies many researchers who define the concept since it was given the first definition of the audit expectation gap as the difference between the levels of expected performance and the results that auditors give, but just a few analyses of the public area using students' knowledge to understand the perception of future users of accounting information or potential bidders of accounting information.

Methodology – This paper represents the beginning of a broader study that will be part of the doctoral thesis entitled "Organization and exercise of public audit in Romania", started in 2009 at the University Babeş-Bolyai from Cluj-Napoca, coordinated by PhD Professor Matis Dumitru. The aim of this paper is to explore the findings of an empirical study, made on 352 students, where the primary data used were obtained through a questionnaire technique regarding the audit expectation gap in the public sector in Romania, looking into the future to obtain responses using a larger respondent group.

Findings – A reasonableness gap was uncovered, there is a gap between the expectation of students regarding the public auditors' profession and their results and there are differences between the level of knowledge of the students regarding the statements in audit and the expectation gap. Also, there is a significant difference in perceptions of the role of the public auditor in respect of fraud detection. The research will be extended to other users of accounting information (accountants, executives, managers, bankers) to see their understanding of the role of external public auditors, this we consider

Originality/value – This paper adds evidence to the important debate about the expectation gap from a region that has had little coverage. In Romania, there is just a few pieces of information regarding the importance of education in reducing the audit expectation gap in the public area. We try to draw attention to two sectors that are left on one side, education and the public domain. A correlation between these two, in the context of the audit expectation gap, will give some answers absolutely necessary.

Keywords: audit, audit expectation gap, expected performance, education.

JEL: M42

Introduction.

Financial scandals that took place both in the 90s as well as in the contemporary period have led to a decline of trust in bankers, managers, professionals and institutions responsible for supervising and regulating the economic activity. The growing demands of the market determine

the regulatory bodies to find ways of improving the economic activity and performance so as to enhance the lost confidence in the professional accountants as a consequence of the economic collapse. The risk, the error or bad performance should be minimised to ensure a fast and sustainable growth. Porter (1993, p.50) argues that the recent increase in criticism of against auditors is due to the failure of auditors to meet society's expectations. The failure of living up to societal expectations has implicated the notion of "audit expectation gap". Reforms have been established in the auditing, accountability and the field of expectation gap, substantial efforts have been made to complete the guiding methodologies and procedures in order to support the professional accountants and empirical research has been also conducted trying to improve the activity, but, little attention has been given to public sector.

Public institutions are important because they give credibility to the government and a reasonable assurance that the assets of the government are protected; the reporting is transparent and the financial operations comply with the ethical characteristic. Taking responsibility, establishing priorities, an achieving and efficient use of resources, all these are necessary, while a way of implementing theme is represented by the decentralization of the control activity so as the managers of departments to be held responsible for the management of allocated funds.

External public auditor shall define a person employed with the Court of Accounts who carries out specific audit activities in the public sector and shall refer to the specific position as external public auditor. The position of external public auditor shall be a public interest one and has a special status due to the assignments and competences, responsibilities, complexity, risks, incompatibilities and interdictions that arise in the enforcement of the law and of the regulations of the Court of Accounts, drawn up in accordance with the law.

What does it mean in this conditions audit expectation gap? In the context of crisis represents the difference between what auditors should have done and the consequences that we are living. In the context of companies is the difference between the expectation of the managers and the result of audit report, and in our paper represents the antithesis between the results from "The Public Report of the Court of Accounts" that we have found on the website of Court of Accounts, the expectation that we have from external public auditors and the expectations results of the future users of accounting information, the students from University of Oradea.

Literature Review .

The **concept** "Audit Expectation Gap" was defined into literature by Liggio (1974, p.27) as the difference between the level of expected performance "as envisioned by the independent accountant and by the user of financial statements." Going further in 1978 the Cohen Commission extended the definition taking into account if a gap may exist between what the public needs or expects and what auditors are expected to accomplish. Porter (1993, p.50) defined the concept like: "the gap between society's expectations of auditors and auditor's performance, as perceived by society." He divides the audit expectation-performance gap in two major components:

- Reasonable gap, represents the difference ("between what society expects auditors to achieve and what they can reasonably be expected to accomplish") and
- Performance gap, represents the difference ("between what society can reasonably expect auditors to accomplish and what they are perceived to achieve").

Performance gap is also subdivided into deficient standards gap, and represents the difference ("between the duties which can reasonably be expected of auditors and auditors' existing duties as defined by the law and professional promulgations") and deficient performance gap represents the difference ("between the expected standard of performance of auditors' existing duties and auditors' perceived performance, as expected and perceived by society").

Regarding the **existence and the evolution** of audit expectation gap a series number of studies reported it, but few were done relating the development in public sector examining the students' perception. Some relevant papers about audit expectation gap with the implication of students are:

Baron et al (1977) investigated in USA the differences between auditors and users of accounting information regarding the perceptions in auditor's fraud detection duties and the study revealed significant difference between the perceptions.

In UK Humphrey et al (1992, 1993) examined the audit expectation gap regarding the role of auditors revealed a significant difference between auditors and respondents regarding their perceptions on the role of auditors, indicating the presence of an expectation gap. Also Dewing and Russel (2002) found presence of an audit expectation gap.

Monroe and Woodliff (1994) examined the effect of education on students' perceptions of audit reports in Australia and they found that auditing students' beliefs regarding the responsibility of auditors, the reliability of financial information and assurance about the future prospects of the company changed significantly with knowledge. It was found that more knowledgeable students assume a much lower level of responsibility of the auditor, less confidence on the reliability of financial statements and assurance over the future prospects of the company.

Pierce and Kilcommis (1996) addressed the effect of auditing education over reduction of the expectation gap. A questionnaire survey was conducted with undergraduate students in Ireland. The study suggested a significant reduction in the misunderstanding of audit regulations by students who have studied at least a single course on auditing.

Frank et al (2001) investigated the perceptual differences between auditors, jurors and students. Results revealed a large divergence in perceptions of auditors and jurors regarding their expectations of the auditing profession. However, the accounting students responded in a manner consistent with the practitioners. From this, the study concluded that accounting students had apparently adopted many of the views of the profession and considered themselves as members of the profession.

The above discussions portray that the prior studies emphasized on the expectation gap among the users of accounting information, managers, officials, jurors and students etc. Different studies were conducted in USA, UK, Ireland, Singapore, Saudi Arabia, Bangladesh etc. This study has focused on the present gap between the auditors' performance and the students' expectations regarding this and whether there is role of auditing education in lessening this gap.

In 2009 Javed Siddiqui investigates the effect of audit education in reducing the audit expectations gap in an emerging economy, and finds evidence that audit education significantly reduces the AEG, especially in the area of audit reliability.

Gary S. Monroe in 1993 examines the effect of education on students' perceptions of the meaning of audit reports and the responsibilities and duties of auditors and the results of the study suggest that education may be an effective approach to narrowing or eliminating the audit expectation gap.

Rehana Fowzia in 2010 makes an empirical study on audit expectation gap: role of auditing education in Bangladesh and investigate whether there is evidence that the provision of auditing subject as part of business degree programmes contributes to narrowing that part of the audit expectation gap which results from a misunderstanding of audit regulations.

Methodology of the study

To achieve the objective of the study we have selected 352 students (license program, master and distance learning) from Faculty of Economics, University of Oradea, divided into three groups. In the **first group** were included students from license and distance learning that **have finished the audit course** last semester, into **second group** there are students from same programs of study

which are **still studying** in the moment of writing but they will finish soon, and the **third group**, consist in master students which **completed advanced audit classes**.

We have choose among from final year students to obtain representative results. Student from distance learning were choose because the most have a higher level of employment 10 years, in this case practical experience is relevant, and the average age is 35 years. The master students have high level of knowledge in audit, also some work experience, they are final year students in master. And the last group, the students from license programe were choose to avoid subjectivity and because they have made an intensive course in audit.

The data used were obtained through a questionnaire technique formed from 10 questions regarding the auditor’s independence, auditor’s responsibilities and the credibility (useful) of the audit report. To provide relevant information to the public sector, and to achieve our objective, in classes was analyzed “The Public Report of the Court of Accounts” for 2009 which provided all the necessary information and related results in public sector. According to the 2009 Activity Plan of the Court of Accounts 1,924 cases were settled, of which 1,267 financial audit missions, 246 performance audit missions and 411 control activities. Also the public entities which the Court of Accounts exercises its competence on by specific activities amount to 10.639, and 1,778 of such entities, that is 17% of the total number, were audited in 2009.

A 7 point Likert scale has been used, ranging from:1 = Strongly agree to 7 = Strongly disagree. The questions were designed based on a detailed review of data based, regarding the findings from another papers (Barron et al, 1977 in USA; Humphrey et al, 1992, 1993 in UK; Schelluch, 1996 in Singapore; Stirbu Dan, 2010 et al in Romania).

Data were collected throughout all the students, the questionnaire were given to classes, in the second semester of the universal year and the response rate was on averaged 67%, because not all the students were in class at the moment of survey, or they didn’t want to take part on survey.

Table 1 Situation of responses

Students categories	Sample sent	Answers received	% response rate
Master (1)	174	101	58.04%
License (2)	200	153	76.5%
Distance learning (3)	150	98	65,53%

The responses, in terms of percentage, have a high rate, the highest percentage is at license, 76.5% but for us the most representative are those from master 58.04 % because they have completed advanced audit classes and distance learning because the level of employment and the experience in labor is much higher.

Findings and discussions

The questionnaire consists of 10 statements regarding the auditor’s independence, responsibilities and the credibility of the audit report. For the selected statements we reviewed international published articles, audit standards and manuals and the information that we found on website of “Romanian Court of Accounts” which helped us to give some expected values to identify the gap between our expected value and those that we received from the survey.

Table 2 Perceptions of Students regarding the statements

Statements	Mean values 1	E.G	Mean values 2	E.G	Mean values 3	E.G
Public auditor's independence						
The public auditors' interest might impact on the activities they conduct.	2,33	1,33	3,42	3,58	1,75	0,75
The public auditor can be involved in the activity of the entity.	6,14	0,86	4,36	2,64	6,32	0,68
The audit team shall consist of one external public auditor.	5,12	1,88	4,36	2,64	5,65	1,35
Public auditor's responsibility						
The public auditor is responsible to report deliberate distortion of financial information.	5,76	1,24	4,76	2,24	5,65	1,35
The public auditor is responsible for directing the internal control system.	6,14	0,86	5,25	1,75	6,32	0,68
The public auditor is responsible for development of the financial statements of the company.	6,14	0,86	5,25	1,75	6,32	0,68
The public auditor has the responsibility to detect all fraud and error in the financial statements.	5,65	1,35	3,42	3,58	5,70	1,30
Credibility in public audit report						
The audited financial statements provide an assurance about the performance of the entity.	3,45	3,55	2,55	4,45	4,65	2,35
Users can have absolute assurance that the entity is free from fraud and error.	5,65	1,35	4,04	2,94	6,32	0,68
The public auditors have to ensure that accounting standards are met.	6,03	0,97	4,36	2,64	6,15	0,85
E.G – expectation gap						

Table 1 provides details of the results of the mean responses concerning the ten statements associated with the independence, responsibility of external public auditors and the credibility in public report. In this table, an audit expectation gap (indicated by significant differences) was detected between the second group and the other two in relation to the auditor's independence, responsibility and audit report. Expectation gap is found for detection of fraud (statement 7), the auditor's responsibility for reporting deliberate distortion of financial information. (statement 4), the auditor's assurance that the entity is free from fraud and error (statement 9) and the auditor's experience of ensure that accounting standards are met (statement 10). The results indicate that the students have more higher expectation on the work of auditors, and also indicate difference between the understanding of activity.

Table 3 Descriptive Statistics on Expectation Gap among three groups

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Expected score	10	1.00	7.00	58	5.8000	2.5298
1st group	10	2,33	6,14	47.41	4.7410	1.8244
2nd group	10	2,55	5,25	41.77	4.1770	0.8534
3rd group	10	0,68	2,35	54.83	5.4830	1.4134

On average the expected score about public auditor's independence, responsibility and credibility in public audit report according to us is 5.80 with standard deviation being about 2.53. The first group who finished the audit subject obtained mean score 4.74 and it means the expectation gap is 1.06. The second group who did not finish audit subject has got 4.17 mean score; it means the expectation gap is 1.63. The third group who has learned both audit and advanced audit subjects achieved mean score 5.48; it means the expectation gap is 0.32. It is apparent that the expectation gap among the groups exist and also is becoming significant according to the role of audit education.

This study suffers from several **limitations**. The scope of the study was limited to only 352 potential respondents. More compelling evidence may have been obtained using a larger respondent group.

Conclusions

The audit expectation gap is detrimental to the auditing profession as it has negative influences on the value of auditing and the reputation of auditors in the modern society. Regarding the nature and scope of audit practices there has been considerable debate about audit expectation gap, define like the differences between what auditors actually do and what third parties think auditors do or should do in conducting the audit practice. According to some researchers, the nature of the expectation gap may be reduced but never eliminated. This paper focuses on the expectation gap from public sector and demonstrates the existence of it, also believes that for reducing such a gap a possible way is audit education, as we have seen that the gap is smaller for group who finished advanced audit classes. The audit expectation gap needs to be addressed from a number of different perspectives in order to eliminate deficient performance by auditors to widen the scope to encompass reasonable expectations and reduce expectations where they are deemed to be unreasonable.

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THE ROLE OF THE ACCOUNTANCY PROFESSIONAL BODIES IN DEVELOPING SOCIAL AND ENVIRONMENTAL REPORTING⁶⁵

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In March 2010, the European Commission renewed its strategy to promote Corporate Social Responsibility in order to ensure long term employee and consumer trust. Corporate Social Responsibility is considered more relevant in the context of the economic crisis because it can help to build (and rebuild) trust in business and to identify new forms of value creation based on addressing societal challenges, which may represent a way out of the crisis. A priority area is represented by companies' transparency on environmental and social issues.

This research aims to assess the involvement of the professional accountancy bodies in the development of social and environmental reporting. After a review of research studies on corporate social and environmental disclosure and the role of the accounting profession in this context, the research identifies the strategies, policies and actions taken by the International Federation of Accountants (IFAC) and of the Federation of European Expert Accountants (FEE) based on content analysis of public documents issued by the two bodies. The cases were selected having the influence exerted by the two organisms on other professional bodies and their ability to trace the strategic lines of the accounting profession at the international and European level.

The basis upon which the accounting profession was founded and continues to exist is public trust, which is the degree to which the public has confidence in the services provided by the accounting profession. Society is currently expressing high demands on the discipline of accounting and therefore the profession is under pressure to expand its horizons to better reflect these demands.

The research revealed that both accounting bodies had an intense activity and initiated political actions in the corporate social and environmental reporting field including sustainability in their strategic objectives. The following areas of involvement have been identified: issuance of assurance, education and ethics standards (in the case of IFAC which is also regulator), educational and web materials, participation in working parties, cooperation with other organisations in the development of reporting and assurance standards, research projects to support decision making, encouraging member bodies to develop similar policies, public statements inviting responsible parties to act. Based on its conclusions the study identifies some research directions to be developed. Academic and professional curricula of Romanian accountants could be analysed in order to determine how they could be improved in order to respond better to these societal requirements. This study identifies the political actions of main professional bodies (IFAC and FEE) that might influence the actions of other bodies and future profile of accountants.

Keywords: Social and environmental reporting, accountancy profession, professional bodies

JEL classification: Q 56, M4, M2

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1.INTRODUCTION

Corporate social responsibility becomes more important in the context of the global financial and economic crises because public confidence in the social and environmental responsibility of businesses has been shaken. Accounting has traditionally focused on an organisation's financial aspects, with a particular emphasis on the reporting of this information to shareholders and management. Lately, there has been growing condemnation of the insufficiency of this kind of information. The primacy of shareholders as owners and maximizing wealth creation for this constituency is being challenged, particularly because has become evident that their short-term financial interests can be incompatible with the long-term viability. Long-term sustainable value creation requires responsible organizations, capable to direct their strategies and operations to achieving sustainable economic, social, and environmental performance. It also requires incorporating wider stakeholder perspectives into decision making. The financial crisis has created widespread scepticism about whether and how business contributes to the wider interests of society. Ensuring that organizations pursue sustainable business models and development practices will require radical changes in the way they do business. Professional accountants need to adapt to a world in which sustainability is the key to long-term business performance, and need to understand how, in their diverse roles in organizations, they play a significant role. The professional accountancy associations are an integral component of the operation of the accounting profession. They represent a link between business enterprise, the state and the (increasingly global) society (Burchell et al. 1980: 5-27). Traditionally, professional accountancy associations have been promoters of regulation and codification of practices. Additionally, the objective which legitimizes them consists in satisfying the 'public interest'. As such, it is justifiable to assume that the professional accountancy associations could have an interest in the social and environmental reporting field. Within this context we purpose identify the challenges raised by social and environmental reporting for the accounting profession and the strategies, policies and actions taken by the International Federation of Accountants (IFAC) and by the Federation of European Expert Accountants (FEE) within social and environmental reporting field based on a content analysis of public documents issued by the two bodies to answer to these challenges. The two cases were selected because of the ability of the two bodies to influence other accountancy bodies and the accounting practice at the international and European level.

2. CORPORATE ENVIRONMENTAL AND SOCIAL DISCLOSURE AND THE ROLE OF ACCOUNTANTS -LITERATURE REVIEW

Corporate environmental and social disclosure practices were explained within the theoretical framework of political economy, legitimacy, institutional and stakeholder theories. The nature and extent of corporate social reporting vary over time and between countries and related to both company size and industry (Adams et al. 1998: 1-21; Cowen et al. 1987: 111-122; Hackston and Milne 1996:77-108; Trotman and Bradley 1981:355-362; Deegan and Gordon, 1996:282-312; Roberts 1991:62-71). Researchers in the voluntary disclosure also reported that corporate governance influences accounting disclosure (Chen and Jaggi 2000:285-312; Eng and Mak, 2003:325-345). Good governance strengthens the quality and comprehensiveness of corporate report. The existence of a specialised committee on the board is also considered important in explaining the quality of this kind of disclosure across countries.

In the last period there has been a proliferation of standards at the global and the european level in the sustainability area. The Global Reporting Initiative (GRI) provides the most recognised global standard with its framework for sustainability reporting.

Within EU were approved Directives requiring social and environmental reporting. The Directive 2003/51 (the 'Modernisation Directive') amended the Accounting Directives and added that European companies are required to include non-financial information in their annual and

consolidated reports if it is necessary for an understanding of the company's development, performance or position. Another amendment of the Accounting Directives (Directive 2006/46) introduced an obligation for listed companies to include a corporate governance statement in their annual report. Both directives were implemented in Romania.

The EU Eco-Management and Audit Scheme (EMAS) is a management tool for companies requiring them to evaluate, report and improve their environmental performance. It states that organisations should make periodic environmental statements publicly available and in order to ensure relevance and comparability of the information, reporting on the organisations' environmental performance should be on the basis of generic and sector specific performance indicators (European Commission)

Recent years have witnessed a continual growth in the number of companies reporting publicly on various aspects of their environmental and social performance. Accountants are now involved in reporting on corporate environmental issues, particularly evaluating contingent liabilities, accounting for emission trading schemes or providing decision-makers with quantitative information on environmental performance (Elkington and Jennings 1991:8-12). Daykin (2006) identifies the role of the internal auditor in corporate responsibility reporting. The objective of the internal auditing function is to improve any process within the organization that will result in improved revenue and reduced risk. Corporate responsibility reporting is varied and has not yet been standardized at the global level. Regardless of the content or format, any company that intends to report on corporate social responsibility issues must first evaluate and determine the values and goals that are to be discussed and reflected in that report. Internal auditors have the responsibility of understanding the stated values and goals of the company. As performance targets and goals are established and distributed among the company and the public execution plans must also be created. The role of internal auditing with respect to corporate governance and their performance goals is to observe and examine the implementation of related execution plans as well as the outcomes of those plans. Corporate management and leadership must be held accountable for all actions within the corporation. Internal auditors must evaluate goals to ensure that reported results are truly accurate as stated and communicated internally as well as externally in either an annual report or separate corporate responsibility report.

An increasing number of sustainability reports worldwide are being assured by a financial auditor. Power (1997:123-146) observes that accountants have begun to compete for work in the environmental auditing field, such as the verification and development of Eco-Management and Audit Scheme (EMAS).

The management accountant has a significant role to play in both the ex-ante area of integrating strategic corporate responsibility thinking in organisations and the ex-post role of generating the corporate responsibility reports. Management accounting professionals are also trained in evaluating investment decisions regarding the future, and thus would be ideal professionals to support the independent assurance process.

3. RESEARCH METHODOLOGY

After a literature review inventorying the challenges raised by social and environmental reporting for the accounting profession our research will concentrate on analysing the policies and actions of main accountancy professional bodies at the international and European level to answer to these challenges.

This research aims to provide insights into the involvement of two leading professional accountancy associations (the International Federation of Accountants and the Federation of Expert Accountants) in the development of corporate social and environmental reporting. The two cases were selected because of the ability of the two bodies to influence other accountancy bodies and the accounting practice at the international and European level. The research design

comprises content analysis of public documents describing actions taken by the two professional bodies and statements of their policies and strategies. The main information source was represented by their web sites.

3. 1. THE INTERNATIONAL FEDERATION OF ACCOUNTANTS (IFAC)

IFAC is the global organization for the accountancy profession having 159 members and associates in 124 countries and jurisdictions. Its declared mission is to “strengthen the worldwide accountancy profession and contribute to the development of strong international economies by establishing and promoting adherence to high-quality professional standards, furthering the international convergence of such standards and speaking out on public interest issues where the profession's expertise is most relevant. IFAC develops reports, policy position papers and comment letters on topics and issues of relevance to the global accountancy profession. IFAC communications activities support IFAC’s overall strategy by increasing awareness of the accountancy profession’s many roles and, particularly, of its contributions to sustained and sustainable economic growth and development.

One initiative in this direction is the development of a web-based tool (IFAC Sustainability Framework) that targets professional accountants who can influence the way organizations integrate sustainability into strategy, planning, enterprise risk management, and operations. It highlights the issues that organizations must address to make sustainability an integral part of their business model. The Framework addresses four perspectives in bringing together all the critical areas required to successfully manage a sustainable organization. These perspectives are: business strategy, internal management, relationship with investors and other stakeholders.

In the same direction IFAC signed a Memorandum of Understanding with the Prince of Wales's Accounting for Sustainability (A4S) Project covering three major initiatives that support the work of professional accountants in embedding sustainable practices in organizations: the creation of a community website to help business leaders, finance professionals, academics, professional accountancy bodies and others exchange ideas and share good practice on how environmental and social performance can be better connected with strategy and financial performance, and embedded into day-to-day operations and decision-making, the establishment of the International Integrated Reporting Committee (IIRC) having as objective the creation of a framework which brings together financial, environmental, social and governance information in a clear, concise, consistent and comparable format, and participating in an Accounting for Sustainability (A4S) Accounting Bodies Network research project in the area of integrating sustainability issues in investment appraisal.

IFAC is represented on the Climate Disclosure Standards Board (CDSB) Technical Working Group which aims to develop standardized reporting guidelines on the inclusion of climate change information in mainstream reports.

IFAC is also standard setter developing auditing and assurance standards, educational ethics standards and standards for the public sector.

Assurance standards evolved as a reflection of the changing landscape and the increasing importance of social and environmental reporting and related assurance services. An increasing number of sustainability reports worldwide are being assured by a financial auditor. International Auditing and Assurance Standards Board (IAASB) of IFAC issued ISAE 3000 “Assurance Engagements”. The importance of reliable data on carbon emissions has also been recognized by the IAASB, which recently set up a working group to look at developing a specialized accounting standard. Due to the increasing need to ensure the reliability of greenhouse gas data in connection with emission trading schemes, the International Auditing and Assurance Standards Board (IAASB) issued a consultation paper “Assurance on a Greenhouse Gas Statement” in October 2009 which may develop into an international standard in this field.

The sustainability aspects need specific competencies in addition to those traditionally acquired by accountants and auditors. The integration of ethical and social aspects in accounting education is very important to the qualification of accountants and auditors who should be able to deal with new professional challenges.

The Professional Accountants in Business (PAIB) Committee of IFAC has as strategic direction to enhance the profile, influence, and relevance of professional accountants in business and issued several research papers related to the role of accountants within sustainability.

The International Federation of Accountants (IFAC) commissioned also a guidance document (*“International Guidance Document: Environmental Management Accounting”*) bringing together some of the best experiences on Environmental Management Accounting (EMA).

3.2. THE FEDERATION OF EUROPEAN EXPERT ACCOUNTANTS (FEE)

Federation of European Expert Accountants (FEE) is a representative organization of the accounting and auditing profession in Europe consisting of 43 institutes from 32 European countries. FEE has released numerous policy statements on sustainability, the most important of which are *“Shaping a sustainable economy”* (July 2009), *“Towards a sustainable economy: the contribution of assurance”* (July 2009), *“Carbon emissions Information”* (July 2009), *“Embedding sustainability into corporate governance”* (July 2009), *“The contribution of the accountancy profession”* (January 2009), *“Cost internalisation”* (January 2009), *“Non-financial information”* (January 2009), *“Multi-Stakeholders: the essence of multidisciplinary teams”* (January 2009).

These policy statements state FEE’s strategy on sustainability issues including the relationship between sustainability and the accounting profession. Each policy statement describes the importance of the issue and its impact on the accounting profession. FEE calls on the International Federation of Accountants (IFAC) to develop a general standard on assurance on sustainability reporting and makes an appeal to regulators to acknowledge that assurance has a role in reinforcing the trust and integrity around sustainability information. According to FEE, the measurement, disclosure and assurance aspects of the carbon emissions will affect the accountants. Carbon emissions data is not yet the subject of formal and generally accepted accounting and reporting standards. Likewise, assurance procedures in respect of carbon disclosures are not yet standardised. FEE stressed the importance of a multi-disciplinary approach in this area and the need for training of accountants in these new techniques.

FEE published also Call for action papers communicating important messages for actions needed to be taken such as: *“Sustainability Disclosures in Financial Information Can Be Improved”*, *“Need to Increase Education in Sustainability for Accountants and Management!”*, *“Enhance Sustainability in the Public Sector”*, *“FEE calls on accountants in organisations of all kinds and sizes to acknowledge their role in embedding sustainability as a core part of strategy and decision-making”*, *“The Federation of European Accountants (FEE) calls for unified global standards to mitigate climate change, integrating sustainability at the heart of policymaking, society and markets”*.

FEE Sustainability Working Party developed Discussion Papers treating technical themes such as: the review of International Accounting Standards for environmental issues, providing assurance on environmental reports, creation of a generally accepted framework for environmental reporting, sustainability information in annual reports - building on implementation of the Modernisation Directive.

CONCLUSIONS

Examination of communication by IFAC and FEE indicates a commitment of the two bodies to the concept of social and environmental reporting. As we could notice the role of the professional accountancy associations is multi-dimensional. The following areas of involvement have been identified: issuance of assurance, education and ethics standards (in the case of IFAC which is also regulator), educational and web materials, participation in working parties, cooperation with other organisations in the development of reporting and assurance standards, research projects to support decision making, encouraging member bodies to develop similar policies, public statements inviting responsible parties to act. Within sustainability reporting, both bodies identify new areas in which accountants should apply their skills to answer societal needs. Accountants are required to understand the regulatory and voluntary reporting environment in which businesses operate and respond to new demands, to advise on risk management and the implications of entering into voluntary reporting mechanisms, to develop frameworks which allow the efficient measurement of financial and non-financial information and either maintain or assure the collection of information, to advise on the development of policies for determining the „necessity to report” decisions (where they exist), to help identify what to include in the report, to provide clear, reliable information and, where required, assurance of it, to advise organisations on the limitations of corporate decisions based on economic grounds, and suggest how externalities can be internalised. Because accountants have a role to play in this field their educational curricula should be developed with environment and sustainability related issues. FEE identified the following themes as necessary to be addressed in the basic and continuing education of accountants: company and business strategy, business ethics and integrity, management (including management accounting), stakeholder awareness, internal controls in relation to non-financial information, management accounting techniques on environmentally sensitive and operations, knowledge about accounting for externalities (“full cost accounting principles”), selection and measurement of KPIs, accounting for emission rights/trading schemes and financial reporting implications, risk approach integrating sustainability issues, sources and techniques of assurance. Future research could test the extent of the integration of these recommendations within the academic and professional curricula of Romanian accountants and establish actions for the Romanian accounting bodies and business universities.

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IMPLICATIONS OF THE APPLICATION OF IFRS FOR SMES IN ROMANIA ON TAXABLE AND DISTRIBUTABLE PROFIT ⁶⁶

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On 9 July 2009, the International Accounting Standards Board (IASB) issued the International Financial Reporting Standard for Small and Medium Sized Entities („IFRS for SMEs”) which aims to provide a financial reporting framework for SMEs falling within its scope. It is a matter for authorities in each jurisdiction to decide which entities are permitted or required to apply IFRS for SMEs. Because of the connection between accounting and taxation certain european countries had a reluctant position related to the application of IFRS for SMEs. Opponents focused on the incompatibility between IFRS for SMEs framework and the principles commonly accepted for tax purposes.

As the individual financial statements drawn up in compliance with IFRS for SMEs will serve for profit distribution under the 2nd European Directive the question arises weather the profits determined under these accounting rules can be considered as realized for distribution purposes. In order to mitigate the mismatch between accounting and distributable profits, Member States will need to reconsider the circumstances in which gains and losses arising from re-measurement at fair value through profit and loss should be considered as realized.

In this scenario, two important questions arise: What are the potential tax effects of the application of IFRS for SMEs? Is the profit determined under IFRS for SMEs available for distribution or some adjustments are necessary? The paper addresses these issues in the context of the Romanian accounting and taxation systems. Romania represents a relevant case study, as it is one of the European countries with a close linkage between financial and tax, where the fiscal profit is dependent on the accounting profit (currently determined under domestic regulations).

The methodology consists in a comparative analysis of the recognition and measurement rules between national accounting regulations and IFRS for SMEs in order to identify the differences with possible consequences on taxable and distributable profit.

The comparative analysis identified tensions between accounting and taxation that should be solved and new accounting policies with impact on taxable and distributable profit. Under these circumstances regulators should analyse if new policies proposed by IFRS for SMEs are acceptable considering the purpose of specific regulations and modify the legal framework.

Keywords: IFRS for SMEs, taxable profit, distributable profit

JEL classification: M 40, M 41, M 48

1.INTRODUCTION

According to IASB, IFRS for SMEs is intended to apply to the general purpose financial statements of entities that do not have public accountability and present general purpose financial statements for external users. EU countries use quantitative thresholds for reporting requirements of companies. It is a metter of each jurisdiction to identify which entities wil be placed within the scope of IFRS for SMEs.

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In Romania it is the Order of the Minister of Public Finance no. 3.055/2009 (further referred as OMFP 3055), which currently foresees accounting principles and rules to be applied in recognizing, measuring, derecognizing and presenting the elements of annual financial statements. OMFP 3055 contains accounting regulations in conformity with the Fourth and Seventh Accounting Directives. The IFRS are mandatory only for listed companies in their consolidated accounts starting January 1st 2007 (OMFP no. 1221/2006) (while the national regulation needs to be applied for their individual accounts), as well as for all financial institutions. An option to choose between the 7th ED and IFRS is available for public interest entities in their consolidated accounts. Starting 2012 IFRS will become mandatory for the individual financial statements of financial institutions.

A number of papers on the Romanian case advocate for a difficult *de facto* and *de jure* harmonization between the regulatory and practical aspects of Romanian accounting and IAS/IFRS. For example, concerning the initial phase of implementation of IASs in Romania, Țogoe (2003, cited in Ionașcu, 2007: 118) noted that there is “a local method, rather brief, of understanding and application of IASs”. On the other hand, Petre and Lazăr (2006:5-6) consider that the regulation of accounting is not connected to taxation. In practice entities might use fiscal instead of accounting rules, but this pertains to practice and not regulation, “there is no subordination of accounting to taxation and accounting rules are not harmonized with fiscal rules” (Petre and Lazăr 2006: 6). They consider that “such an opinion that accounting serves fiscal interests represents at least not knowing the current Romanian reality” (Petre and Lazăr 2006: 6). Bunea (2006: 143) shows that 80% of the sample he studied upon felt the need of detailed regulations, and only 20% agreed with the principle-based regulations. 59% consider that OMFP 1752 is not sufficiently detailed, and this might be an explanation for the use of the same (previous) accounting practices (Bunea, 2006: 144). Also, 97% noted that in the absence of a detailed rule in OMFP 1752, they choose the fiscal solution.

From the perspective of the implementation of IFRS for SMEs, Romanian authors generally agree that implementing such a referential would lead to significant improvement of financial communication by Romanian entities: higher quality of the reported accounting information, homogeneous accounting rules (there would be no requirement to follow Directives vs. IFRS), better understandability and comparability.

As literature reveals that tax accounting relationship rises problems even under current accounting framework it is reasonable to conclude that these tensions will be encountered if IFRS for SMEs is to be applied.

The main arguments advanced in the literature against IFRS relates to the investor focus and information orientation, along with its tendency towards fair value accounting. Critics are concerned that these aspects of IFRS will lead to the distribution of “unrealized” profits, making IFRS inadequate as a basis for calculating distributable income. The introduction of IFRS as a potential basis for profit distribution poses a definite challenge for the European Union as a legislator and it can be questioned whether the 2nd Directive in its current format is sufficiently prepared for this challenge. Even if fair value is used less in IFRS for SMEs national regulator will have to analyze if the new accounting profit is available for distributions.

2. Literature review

Literature agrees on three aspects of IFRS that make controversial their concrete application in the modern tax systems: the balance sheet approach, the use of fair value accounting and the substance over form principle (Shön 2004: 426-440; Jacobs et al. 2005; Eberhartinger and Klostermann 2007:141-168). Although their influence is smaller under IFRS for SMEs they are still issued to be solved. In most European countries, including Romania the accounting income is the base for the calculation of corporate taxation with limited adjustments required by tax law.

This form of the relationship between accounting and taxation is referred to as “quasi-dependent approach”. Under the quasi-dependent approach the shift to new accounting standard is expected to have effects on the tax regulations.

The European Commission, having indicated in its recent Communication that it had no plans to change the 2nd Directive. Besides the political decision, further research is needed to investigate whether there is a need for an alternative capital maintenance regime. The following research questions should receive a documented answer in the context of the application of IFRS for SMEs: Why most EU Member States do not allow IFRS for SMEs? Does dividend distribution play a role?

3. RESEARCH METHODOLOGY

The methodology involves the comparative analysis of IFRS for SMEs and current accounting regulations on one side and of fiscal and company law legislation on the other side in order to identify the differences that might have an impact on taxable and distributable profit.

3.1. Tax Implications Of Ifrs For Smes In Romania

We propose within this section to illustrate the fiscal implications of the application of IFRS for SMEs in Romania. Our analysis will aim the provisions of the Fiscal Code and current accounting regulations (OMFP 3055/2009 as amended by OMFP 2869/2010 and 2870/2010). The main connection between tax and accounting is related to the calculation of the income tax. In Romania there is a direct relationship between financial accounting and tax, involving a “quasi-dependent approach”. Taxable income is computed on the basis of the accounting results, with specific adjustments required by tax law when accounting criteria are not suitable for tax purposes

According to the Declaration for the calculation of tax on profit (101) taxable profit is determined after the following formula:

Fiscal profit = Accounting profit (gross result) + Elements assimilated to income- Elements assimilated to expenses- fiscal deductions- non-taxable income+ non-deductible expenses- fiscal loss to be recovered

Revaluation reserves and gains related to the sale and cancellation of own participating titles are assimilated to income while losses from the sale of own participating titles are assimilated to expenses. The following incomes are not taxable: dividends received from a Romanian legal person or from a EU legal person in certain circumstances, favourable differences of value for participation titles that are recorded as the result of the incorporation of reserves, benefits or issuance premiums by the legal persons where the participation titles are held, as well as valuation differences for long-term participating titles and bonds issued (such differences are taxable on the date of their transfer for free, assignment, withdrawal of the participation titles as well as on the date of the withdrawal of the social capital in the legal person in which the participation titles are held), incomes from the cancellation of expenses for which no deduction was allowed, incomes from the reduction or cancellation of provisions for which no deduction was allowed and incomes from the recovery of non-deductible expenses, non-taxable incomes expressly provided in accordance with memoranda approved by normative acts.

The fiscal treatment of fixed assets is described by the fiscal code and it is not dependent on their accounting treatment. The normal period of use and depreciation methods applicable from a fiscal point of view are described by the fiscal legislation. The accounting regulation defines separately the accounting useful life and acceptable depreciation methods. Cost formulas (FIFO, LIFO, WAC) used for accounting purposes are recognised also for tax purposes. The fiscal treatment of research and development costs follows the current accounting treatment. Special

conditions are prescribed for the deduction of interest and foreign exchange losses but they do not concern valuation (accounting valuations are recognised for fiscal purposes).

As a general rule all accounting incomes *are taxable* excepting when they are explicitly non taxable by law. Because of this connection any change of the accounting framework has consequences on taxable income if no change is operated to the Fiscal Code. Because an accounting income is implicitly taxable it must be certain as each tax payer to know the amounts payable and avoid a different interpretation by the fiscal authority. It means that revenue recognition methods involving estimates are not acceptable from a fiscal point of view and adjustments will be necessary. Recognition of gains based on fair values would bring more volatility to taxable profit calculation which is not desirable if the fiscal authority wants a reliable projection of fiscal income. A solution would be as the fiscal authority to establish different tax bases for assets valued at fair value. According to the general tax deductibility principle, expenses are deductible only if they are incurred with a view to generating taxable income. An expense is deductible if it fulfils the following conditions: a causal relationship exists between the expense and a taxable income, the expense is properly backed-up by supporting documents, the expense is not explicitly non deductible by law or it doesn't have a limited deductibility by law.

Under current circumstances even if companies would generally be in favour of an introduction of a more relevant financial reporting framework they would oppose it because of expected tax effects especially if the consequence would be an increase of taxable profit. Impairments of tangible and intangible assets and write downs of inventories are not deductible for tax purposes. Write downs of trade receivables and provisions are deductible within the limits describes in the Fiscal Code.

For cases where Romanian tax calculations follow financial reporting rules the tax authorities would need to establish new tax rules that would have to be much the same as the existing Romanian financial reporting rules but different from IFRS for SMEs. These, could lead to new adjustments from accounting profit to taxable income. The application of IFRS for the individual accounts of banks starting 2012 will require a fiscal solution and other entities willing to adopt an IFRS based framework could benefit from it.

We present below the possible effects of adopting IFRS for SMEs on accounting profit and implicitly to the taxable profit if no change is made to current Fiscal Code.

Table no 1. Effects of adopting IFRS for SMEs on accounting profit

Accounting policy in compliance with IFRS for SMEs	Possible effect on accounting profit
No LIFO (assuming increasing prices)	+
Profit on uncompleted contracts based estimated percentage of completion	+
Development cost expensed	-
Losses recognised for derivatives	-
Gains recognised for derivatives	+
Losses on biological assets at fair value	-
Gains on biological assets at fair value	+
Gains on investment property	+
Losses on investment profit	-
Abandonment of matching approach for grants –recognition of grant income	+
No capitalisation option for borrowing costs	-

- realised by the authors-

Key:

+ = more or faster recognition of profit

- = less or slower recognition of profit

In IFRS for SMEs set up cost research and development costs are expensed. According to OMFP 3055 development costs are capitalized if they meet conditions similar to those prescribed by IAS 38 and fiscal rules are based on current accounting rules. According to IFRS for SMEs investment property is carried at fair value if fair value can be measured without undue cost or effort with pluses and minuses in the income statement. OMPF no. 3.055/2009 does not define specific accounting policies for investment property. The accounting policies specific to PPE are applied. The percentage of completion method is not accepted by OMFP 3055 for construction contracts. The revenue is recognized when the reception document for the outcome completed is signed by the beneficiary. Costs incurred for the contract but not yet accepted by the beneficiary should be recognized as work in progress (within inventories category). The accounting treatment is recognised from the fiscal point of view. The use of LIFO is allowed by OMF 3055/2009. The accounting policies specific to inventories or tangible fixed assets are applied for biological assets and agricultural produce. Valuation at fair value less cost to sell is not allowed under national regulation. The prescriptions of OMFP 3055/2009 for government grants are in line with IAS 20 while section 24 of IFRS for SMES does not allow an entity to match the grant with the expenses for which it is intended to compensate or the cost of the asset that it is used to finance. Discounting of revenues is not required by OMFP 3055. For customer loyalty programmes the sellers recognise under OMFP 3055 a revenue for the gross amount and a non deductible provision for their obligation to provide free or discounted goods or services. According to OMFP 3055/2009 borrowing costs *may* be capitalized for assets that necessarily take a substantial period of time to get ready for its intended use or sale. Capitalization is prohibited by IFRS for SMEs. Fair value is not used for derivatives under OMFP 3055.

In order to determine taxable profit tax payers should draw up the Register of Fiscal Records (the use of this register is regulated by OMFP no 870/2005 modified by OMFP no 1857/2006 and OMFP no 949/2005). This register reflects all information relevant for the calculation of taxable profit and income tax. The filling procedure will be defined by each taxpayer considering the specificity of its activity and its own needs. This Register will be used more if IFRS for SMEs is adopted.

3.2 Effects on distributable profit

The accounting profit is implicitly distributable after deductions prescribed by the Company Law and OMFP 3055/2009. Dividends may be distributed only from real profits. Companies are required to set up a legal reserve which is calculated as 5% of the gross accounting profit until this reserve reaches 20% of the paid in share capital. If the correction of an error generates a loss carried forward it must be covered before any distribution. The unrealised revaluation reserve is not distributable. In so far as formation expenses have not been completely written off, no distribution of profits shall take place unless the amount of the reserves available for distribution and profits brought forward is at least equal to that of the expenses not written off. In so far as development costs have not been completely written off, no distribution of profits shall take place unless the amount of the reserves available for distribution and profits brought forward is at least equal to that of the expenses not written off. Any change made to the accounting profit will affect distributable profit. The use of fair value will bring volatility in distributable profit which could affect the ability of the company to pay dividends. The changes that will affect the accounting profit identified above will affect also distributable profit.

CONCLUSIONS

Being inspired from IFRS, IFRS for SMEs focuses on the financial position of a company rather than to the historical performance shown by the income statement. This contrasts with tax principles requiring the tax base to be computed by with reference to the past results (Freedman, 2004:71-79). The fair value accounting conflicts with other tax principles, such as ability to pay, enforceability and tax revenues stability. The use of fair value will bring volatility in distributable profit also which could affect the ability of the company to pay dividends. Including or deducting any unrealized gains or losses may imply, for the taxpayer, liquidity constraints to pay taxes and, for tax authorities, a fall in the ability to raise revenues. Any income or expense involving a certain degree of subjectivity will conflict with the need of certainty and gives a boost to tax avoidance. It results that the fiscal authority will have to define fiscal treatments different from those of IFRS for SMEs. Fair value accounting increases the volatility of profits and, hence, does not match with the need to rise revenues with sufficient stability over the fiscal years (Freedman, 2004:71-79). The fiscal authority will have to define tax bases for assets and liabilities diferent from their fair value. The substance over form principle is also problematic. Tax system is based on the legal form of transactions and, only with the aim to contrast avoidance attitude, specific exceptions are introduced. The application of substance over form in its accounting understanding is not acceptable from the fiscal point of view in all cases. The comparative analysis above releals that the application of IFRS for SMEs will have an impact on taxable profit and distributable profit as defined by current legislations. Under these circumstances regulators should analyse if changes are acceptable considering the purpose of specific regulations and modify where is the case the legal framework.

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STUDY REGARDING THE INFLUENCE OF ROMANIAN ACCOUNTING REGULATIONS ON CREATIVE ACCOUNTING TECHNIQUES

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The main objective of this paper is the analysis of Romanian accounting regulations and the identification of the impact they have on creative accounting techniques. Also, we shall investigate the influence some of these creative accounting techniques have on the true and fair value. Basically, we desire to answer the question: to what extent is being affected the true and fair value reflected within the financial statements of a certain entity by appealing to creative accounting. At international level there are several papers having as subject creative accounting, most of them emphasizing the negative role it has upon achieving the true and fair view. The papers that analyze creative accounting techniques in Romania are rather few, reason to start studying the extent to which Romanian accounting regulations allow the use of creative accounting techniques. We shall use the experience comprised within papers published at international level in order to substantiate an objective analysis of creative accounting techniques in Romania and of the impact they have on true and fair view. Being familiar with the creative accounting techniques is equally useful to the entire palette of accounting information users, including the researchers, for one can quantify the positive or negative impact they have on the true and fair value. One can bring suggestions to modify the accounting regulations, if some creative accounting techniques affect the legitimate interests of certain accounting information users. Also, one can perform analyses regarding the situation of this field in Romania in comparison with the existent situation in other countries. The paper's originality is given by the study on the impact of applicable accounting regulations in Romania on creative accounting techniques. There are very few studies in this field in our country and we appreciate that it would be a useful source for the accounting information users. Also, the usefulness of this study is given by the suggestions concerning the instruments to identify the creative accounting techniques that have a negative role on financial statements, so that they would keep their relevance and credibility for the users of accounting information.

Key words: creative accounting, true and fair value, regulations, corporate governance, financial statements, flexibility

JEL CODE: Accounting and Auditing: General M40; Government Policy and Regulation M48

I. Introduction

Specialty literature presents several factors liable to stimulate managers in using creative accounting techniques.

A first hypothesis is the situation in which managers' salaries are calculated according to the accounting result. In this situation they will be tempted to have an opportunist behavior, choosing those creative accounting artifices which allow them to keep these rights to a high level. Therefore, one can meet two situations:

when the results exceed the maximum limit established by means of contract, the surplus will not be registered within current period, but it will be used in the subsequent period when it will be remunerated;

when managers will confront with the opposite situation, finding themselves in the situation of registering great losses, they will apply the method of increasing those losses by including all future probable losses, which will have as a result future superior profits.

According to the creative accounting theories there is a connection between the use of creative accounting techniques and managers' incompetence. A company that has reached an unstable situation will undoubtedly begin to use creative accounting techniques in order to artificially increase profit, and thus, the financial situation to be temporarily concealed. The advantages would be to maintain the suppliers' credibility in order to avoid their refusal regarding the grant of commercial credit or the decrease of credits' refunding period towards financial creditors.

The extremely diverse character of economic activities involves resorting to certain particularities concerning their evaluation, particularities that allow a specific reflection of that certain economic event. The existence of this possibility implies using options for evaluation. Choosing one option or another sometimes relies on professional judgment; therefore, different financial results are obtained according to every accounting specialist's opinion.

Inevitably, the requirement itself of providing the true and fair view can lead to creative accounting, starting from the premise that in order to achieve the true and fair view it is necessary an honest applying of accounting regulations. Sometimes, though, compliance with rules is not enough. Rules cannot be considered a complete code of inflexible rules, replacement of professional judgment. In this sense, the IV Directive explicitly mentions that "when applying an accounting foreclosure is not enough to provide a true and fair view, within annexes one must furnish additional information [...] and if, in an exceptional situation, applying an accounting foreclosure is inappropriate for providing a true and fair view to the patrimony, financial situation and result, one must make a derogation from this foreclosure". Therefore, a true and fair view could be achieved only by noncompliance with effective rules, and this derogation may lead to exaggerations and distortions of the reports from financial situations.

One of the elements that may lead to applying some creative techniques may be even the pressure of certain categories of users. An example could be the investors who desire a larger profit in order to raise dividends to more superior values, fact that would induce a pressure upon administrators in this sense.

Because the fixed relationship between cost and expected yield is very volatile for immaterial investments it is very difficult to identify and to measure most of these assets. The problem is even greater as the progressive increase of immaterial investments requires taking them into account in order to define the enterprise. Therefore, this is a favorable field for creative accounting to manifest, having a potential effect of distorting the accounting information in time and space.

Another element that could induce creative accounting, in specialists' opinion, would be the absence or insufficiency of national accounting norms regarding the constitution of social and consolidated accounts. In some authors' opinion (Bernheim, 1993: 58-60, 93), creative accounting practices lean more and more towards a so-called "real management of accounting result" in order to maximize it. According to other authors, besides this objective, creative accounting also aims to increase equity and to decrease the gearing rate (Feleagă, 1996:151).

II. Research methodology

Under the aspect of mainstream research, our paper is oriented to the positivist theory, pursuing to explain through a detailed and thorough approach the different sides of the matter concerning creative accounting techniques in the light of Romanian accounting regulations. We intend to use

some elements from the interpretative and critic theories, as a result of approaching different concepts, regulations and practices in this field, in a interpretative and critic manner, following a deduction-based approach. By studying the Romanian accounting regulations one can grasp the applicable creative accounting techniques and their influence on the true and fair value. The limit of this research is the fact that it represents only a fundamental research and it is not complemented with an applicative research which would identify the practical instrument to apply the creative accounting techniques.

III. Creative Accounting Techniques

Creative accounting techniques regarding non-current assets

Creative accounting techniques regarding non-current assets generally refer to the treatment of development costs and of goodwill, to revaluation, amortization policy and impairments, to capitalization of expenses subsequent to commissioning and to interests. For example, creative accounting techniques regarding the development costs are linked to the decision to capitalize or not the expenses, and also to the capitalized expenses' value and to their amortization policy.

The difference between development cost and research costs creates premises for creative accounting manifestation. Thus, an entity that uses a policy of capitalizing development costs can increase or decrease the result of a financial year by simply transferring them within the research category, situation in which the profit and loss account is affected, or within the development category, situation in which the balance sheet is affected. Moreover, the entity can invoke at any time uncertainties regarding the project finalization in order to transfer the development costs from the balance sheet to the profit and loss account (Feleagă & Malciu, 2002: 399).

Creative accounting can also emerge when there are common expenses for several projects, and their delimitation on every project has a subjective character. Also, the dimension of goodwill is easy to manipulate. Thus, the undervaluation of purchased elements determines the increase of goodwill and provides an image of fake profitability in the future.

Creative accounting regarding tangible assets envisages the asset revaluation, the capitalization or not of certain expenses subsequent to commissioning, the amortization policy, and other special transactions.

Amortization policy influences the result evolution by means of three variables: Depreciable cost; Amortization's duration; Method (regime) of amortization (linear, accelerated, and digressive).

In certain countries the depreciable cost is the difference between the input value (historical cost) and the residual value estimated at the end of the period of use. We can observe here a moment in which creative accounting emerges, which is linked to the residual value's estimation and then, at the end of subsequent years, to the revision of this estimation. In Romania, according to the existent accounting regulations, residual value is null, therefore it is not taken into account when calculating the depreciable cost.

Amortization's duration is an accounting estimation available to the economic entity's board, situation which involves subjectivism and, therefore, creative accounting. Within OPFM (Ordinance of the Public Finances Ministry) no. 3.055/2009 it is mentioned that: the amortization of tangible assets is calculated according to a plan of amortization, from the date of their commissioning until the full recovery of their input value, according to their terms of economic use and their conditions of use. The amortization calculated according to its terms of economic use is called financial amortization. Usually, in order for the accounting amortization to be equal with financial amortization, in practice economic entities establish the terms of economic use within the time span in which the normal functioning duration is comprised.

We can also mention that the term of economic use is an accounting estimation, thus, economic entities can modify it subsequent to the commissioning of that certain asset, fact that generates modifications of accounting amortization with all its implications upon the financial year's result.

The situation becomes more complicated if we also take into account the recoverable value of tangible assets at the end of the financial year when the impairment for non-current assets must be registered. Apparently, book value is objective, because at the moment the non-current assets are registered within the entity, it is validated on the market. One must not forget that in order to compare it with the recoverable value, from the book value one must subtract the registered amortization, the latter involving a series of variables.

Creative accounting techniques regarding the non-current assets' revaluation are usually used by the entities that suffer difficulties in order to increase its equity (revaluation reserves) and, thus, to artificially increase their debt capacity. Another place where creative accounting can emerge is the non-current assets production, by means of registering within the non-current assets' value the fixed costs (salaries and amortizations) related to the subtask.

In this sphere of creativity linked to non-current assets we can mention the lease-back operation which consists of selling a non-current asset to a leasing company, which is subsequently taken over in financial leasing. In this manner, the economic entity obtains the necessary economic resources in order to normally develop its activity and, at the same time, it can still use that certain asset, as if the entity still owned it. During the year the transaction is performed, the result increases, but it will decrease during the subsequent years by means of the leasing rates it will pay. The higher the transaction price is, the greater leasing rates and interests paid by the entity will be.

Concerning the financial assets the problem that raises is whether to include them in this category or within the short-term financial investments, thus, modifying the economic indicators and also the determination of adjustments for depreciation. According to the principle of prudence, every loss of assets' value must be acknowledged as an expense by determining adjustments for depreciation.

Another example is the one related to selling equity investments in a moment when the market report is significantly greater than the purchase price; afterwards, the entity proceeds to repurchase them. The same technique is used when updating the securities' input value and, simultaneously when increasing the result, even if the entity has to pay certain brokerage fees and the tax on the profit generated by the transaction.

Creative accounting techniques regarding current assets

Creative accounting regarding current assets occurs in the following directions: stock evaluation, volume of stored production, choosing the accounting method for construction contracts, the artificial cession of placement securities, the calculation and registration of adjustments for stock and receivable depreciation, etc.

The decision to constitute or not stocks of finished products enables an entity to improve its result.

The decision to continue the production, even without immediate usefulness, allows hiding the subtask costs and obtaining a favorable result. Certainly, there is the risk that the market will not accept these products without a firm order, and therefore, they will transform in loss in the next period.

The subtask's cost accounting can be another manner of creative accounting manifestation. In management accounting there are two manners of including fixed costs within products' costs: the full-costing method and the method of rational imputation. According to the full-costing method, the production cost consists of a share from the annual fixed costs in the following proportion: $\text{annual fixed costs} \times \text{quantity in stock} / \text{annual produced quantity}$. According to the method of rational imputation, the production cost consists of a share from the annual fixed costs in the following proportion: $\text{annual fixed costs} \times \text{quantity in stock} / \text{annual normal quantity}$. In the first situation there is not such a subtask cost, all fixed costs being included within the production

cost even if the production capacities have not been used at their full capacity, while in the second situation the costs related to not using the production capacity is directly discounted upon the result without being included within the production cost.

Creative accounting can also manifest in what concerns the methods used (the direct method or inventory method, respectively the indirect method or accounting method) in order to evaluate unfinished production at the end of the financial year.

For the construction contracts which develop during a longer period of time one can apply two accounting methods: the method of progress percentage, when the revenues and expenses from the contract are acknowledged as the percentage of works in progress is registered within every financial year, which has as effect benefit distribution in every financial year; and the method at completed works, when the result is acknowledged only after the construction works are completed.

When using the method at completed works, the result will be acknowledged only at the completion of construction works, until then the value of registered expenses being acknowledged as work in progress.

In what concerns stocks, if their record is kept according to effective cost (purchase cost or production cost, as appropriate), the evaluation of stock outputs being made through FIFO, LIFO or CMP method, which, in case of inflation, ensure the achievement of different results. An entity's result does not only rely on real economic performances, but also on the option for a certain method of stock evaluation.

Another case of creative accounting emerges in the case of circular transactions, when two or more economic entities perform transactions amongst them in order to improve their results; for example, when two entities sell the same type of stocks at the same price to each another. From the cash-flow point of view the impact is null, because everything one pays, one charges; from the VAT point of view the impact is also null because the purchase price is equal with the sale price. The sole difference is that the purchase cost of stocks would eventually increase (therefore, an increase of assets' value is registered) and, simultaneously, the result would also increase (the equity volume increases). In this situation, there is a price that the two entities have to pay in order to embellish their results, which is the tax on profit that registered an increase.

If the economic entities consider that there is a risk of not charging certain receivables, they can insure them. In this case there is no longer need to constitute an adjustment for receivables' depreciation. There are companies which, urged by the desire to achieve a good embellishment of the result, insure the receivables only after the depreciation is determined. Thus, if the company determines the depreciation in the first year and within this year it is registered a high profit level, it will be interested in creating an adjustment for depreciation. When the result is unsatisfying, it will insure the receivable, registering expenses with the insurance premium and revenues from adjustments (Malciu, 1999: 18-28). Creative accounting regarding short-term financial investments manifests by including them within the non-current assets category, by means of cessions of placement securities, followed by their repurchase when the sale price is significantly higher than the initial purchase cost, by registering or not adjustments for depreciation.

Creative accounting techniques regarding liability elements

Creative accounting regarding liability elements concerns share premiums which can be used in three directions: capitalization, including them within reserves and covering the expenses generated by new shares' issuance and sale. The expenses generated by issuing and selling new shares are initially registered as assets, within set-up costs and from this point creative accounting may emerge: either set-up costs are amortized and, therefore, the result is directly influenced, or set-up costs are covered by share premiums.

Choosing the second situation is justified by the fact that it does not affect any shareholder, but it favors the state by not including an expense within the result and, therefore, one pays a greater tax on profit. However, applying this situation, the result remains higher which misleads the external users who give priority to result variation and less to share premium variation. Another liability element taken into account are the provisions which have the role to cover risks, expenses or losses that are uncertain concerning their dimension or the moment of their emerging. They occupy an intermediary position between equity and debts. Because they require estimations, provisions create conditions for results' smoothing.

Another creative accounting technique is related to debts towards employees. This technique especially emerges within small entities where the associates are not limited to capital contribution, but they also make a work factor contribution. The remuneration for the work force is the salary, but in order to avoid pay taxes considered too high, the associates register themselves as self-employed persons which, according to their field of interest, pay an annual fixed tax, irrespective of obtained revenues. Therefore, in this case, there is a profit transfer within the entity which pays the tax on profit, by means of bills issued by entity's associates for their work, at the level of an individual who pays the flat tax. The associates win twice: firstly, they make savings from the tax on profit, and secondly, they do not have to pay the tax on dividends. This way, creative accounting is used for optimizing financial pressure, taking into account that the associates are not very interested in the information published within financial situations as the entity is a closed company (not quoted to stock market) of small dimensions.

A creative accounting technique that has a direct impact upon the result of the current financial year emerges within certain entities which establish by means of formal or informal agreements that the buyer may return the goods that have not been sold. Basically, this practice does not pursue to influence results but, in certain situations, it can be considered a method of result smoothing if in the year the sale was performed, economic performances are inappropriate. In this manner, in the year the sale was performed profit will be acknowledged, and the next year a decrease of profit will be registered in return.

One of the reasons for which annual financial situations are being approved after a certain period from the moment the financial year is closed is to identify events and transactions subsequent to that moment, but which actually belong to that certain closed financial year, in order to influence its results. If, at the end of the financial year goods sales are performed, followed by their return in the next financial year, which is previous to the approval of annual financial situations for the closed financial year, there are methods to remove the effects upon the result, as it follows: the revenues registered from sale will be annulled at the end of the financial year, and stocks will be considered as being produced by third parties and, therefore, stock variation related to sold products will also be annulled. The sole negative impact on the seller remains the VAT within the financial year in which the sale is performed, but it will be recovered in the next financial year.

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THE GOING CONCERN – THEORY AND PRACTICE IN THE FINANCIAL AUDIT

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Introduction

The whole financial and economic world is really interested in more reliable information so as to be possible to avoid bad events or, perhaps, the crisis.

It is known and equally acknowledged that financial audit might have been more useful in preventing the actual financial crises. It is strongly necessary for further debates on the subject and for the most effective levers to enforce the best practical examples in the field.

Therefore, we consider that a component part of financial audit activity that might be a source for more debates and, as a result, for some better results in performing financial audit, would be both the concept and the practice of “going concern”.

The results of our research show that we could reconsider the moment of the going concern assessment. It is not necessary to be performed at the same time with the audit of the annual financial statements. It also might be required by the investors, mainly by the stockholders, at any time they wish. This fact would induce changes in the actual standards statements which refer to auditor’s and management’s responsibilities regarding “going concern”. Not the latest as importance appears the fact that in this situation a larger team, and more competitive, being compounded from a wide range of experts along with the financial auditor, could perform the audit mission of going concern.

The paper is structured as the following: an overview of the main approaches of the subject of “Going concern” in both scientific literature and in the regulators work, the analysis of some data published by The Securities and Exchange Commission (SEC) along with the results and proposals of some other authors in the field, conclusions and my own proposals.

The main scientific background and regular framework

The most recent studies on “going concern” are focused on the following aspects:

The going concern concept and its component part. Thus, *Nirosh Kuruppu, Fawzi Laswad and Peter Oyelere(2003)* accepted that the going concern is a concept that assumes that the reporting entity will continue in operation for the foreseeable future, and that it will be able to realize assets and discharge financial obligations in the normal course of operations.

The methodology of going concern assessment and its impact and connection with the auditor’s opinion: *Mahdi Salehi and Co. (2009)* declares that one of the ranking methods in relation with going concern concept is applying financial ratios through a combined form. Liquidation prediction model for assessing going concern can be used as a valuable audit tool due to the high costs associated with misclassifying failing companies argues *Nirosh Kuruppu and Co.*

The behavior of financial auditors facing certain kind of regulations and the practical answer of the management representatives to the modified going concern opinion. *Sylvia Constantinides (2002)* analyzed the influence of a going concern opinion on three categories of actors respectively auditors, bankers and insolvencies practitioners and concluded that there is a different way of behavior. *A.Rosman (2011)* found that auditors are adaptive in ill-structured tasks and rigid in structured tasks as predicted by theory. The likelihood of default for firms that received going concern opinion is 2.792 times that of firms that received a clean opinion shows *Alnoor Bhimani, Mohamed Azzim Gulamhussen and Samuel Lopez (2009) from London School of Economics, United Kingdom.*

Marshall A. Geiger, K. Raghunandan, and Dasaratha V. Rama (2005) documented that the increase in going-concern modification rates for bankrupt companies after December 2001 is due to changes in auditor reporting decisions and not solely due to differences in client characteristics between the times periods studied.

The regulations on financial audit started before nineties with the description of going concern principle in 1975 - *IAS 1 Disclosure of Accounting Policies*- continued with US SAS 59 issued in 1988 by American Institute of Certified Public Accountants (AICPA). In 2002 after the famous bankruptcy of Enron, *the Sarbanes Oxley Act* brought tougher regulations that refer to going concern as well. Beginning with 2009, the going concern activity is performed on the basis on the International Standard on Auditing *ISA 570 Going concern* according to which the auditor's responsibility is to obtain sufficient appropriate audit evidence about the appropriateness of management's use of the going concern assumption in the preparation of the financial statements and to conclude whether there is a material uncertainty about the entity's ability to continue as a going concern.

After the financial crisis beginning IFAC issued recommendations both to its members and to the representatives of the G20 members aiming at convincing the decision factors from those countries to take the proper measures in the financial and accounting field, including financial audit, so as some of the crisis' causes to be effectively prevented. Thus, the recommendations for G-20 meeting of April 2009 and of June 2010 refer to the necessity of *Strengthening Transparency and Accountability in the Context of the Audit of Financial Information*. On the same purpose IFAC issued in 2009 the document headed *Audit Considerations in Respect of Going Concern in the Current Economic Environment* that deals with the effect of the credit crisis and economic downturn on an entity's ability to continue as a going concern and whether these effects ought to be described in the financial statements. One of the document key message consists in stressing the fact that going concern assumption is a fundamental principle in the preparation of financial statements and that the assessment of an entity's ability to continue as a going concern is the responsibility of the entity's management.

Method and data

In order to document my opinion of separating the audit mission of a going concern from other auditors' engagements, particularly from the audit mission on the annual financial statements, I used two levers: a study of a sample of data provided by Securities and Exchange Commission (SEC) and an analyses of the most recent scientific papers of other authors dealing with this subject and whose findings entitle me to go forward with the proposal.

On a sample of eighty entities published by SEC on April 18th and April 22th, 2011, at each date forty filing entities, I studied their documents for going to bankruptcy, the moment of filing, the auditor's opinion on the annual financial statements as well as the connection between the financial auditors' opinion and the decision for bankruptcy of these entities management. The SEC information offers a list of the most recently bankruptcies received and processed at SEC. Therefore, those eighty entities sampled at different dates appear relevant to the goal of showing the connection between financial audit opinion and the decision on filing for bankruptcy. After selecting the sample we searched on each entity's own site the latest financial audit report. In this way we found out the moment of the financial audit opinion (before or after filing), the type of decision and finally its connection and influence on the bankruptcy's proceedings.

From the analyzed data encompassed in the (*Table 1*) result the followings:

Table 1. Audit opinions for the sampled entities

Nr	Audit opinion	Date of April 18th 2011	Date of April 22nd 2011	Total	Percentage from total	Number of entities getting the audit opinion	
						Before filing	After filing
1	Going-concern modified	9	11	20	25%	20	–
2	Not modified	28	25	53	66%	23 (43%)	30 (57%)
3	No audit report	3	4	7	9%	–	–
4	Total	40	40	80	100 %	43 (58%)	30 (42%)

Realized by the author

- Only a quarter from all companies got a going concern modified opinion before filing. At the same time these entities represent less than a half (46%) of all entities getting an opinion before filing.
- The majority of all companies got an unmodified opinion and from all of these 57% is represented by those getting it after starting the bankruptcy proceedings. That means that the connection between the decision for bankruptcy and an unmodified opinion hardly exists.
- There are some entities (9%) that maybe did not at all get an audit opinion or their report was not published. Nevertheless, because of their small percentage, they do not affect or change the previous results.
- On the whole, we could assert that a slim majority of the companies got an opinion before filing for bankruptcy and from all of them, a big majority, is represented by those getting an unmodified opinion.
- Studying the content of some auditors' opinions we found that they are strongly criticized by the stockholders' representatives when somebody should account for the bankruptcy situation.

Analyzing the conclusions of the most recently published papers on the subject we found that they consistently support the idea that: financial auditors' behavior concerning the new, stronger regulations or a litigation environment is extremely subjective, there are many disadvantages for the companies getting an modified opinion even if they are in the position to escape bankrupt situation and that there is hardly a real connection between the bankruptcy decision and the unmodified opinion of the financial auditors.

Thus, *M. A. Geiger and K. Raghunandan (2002)* demonstrated that changes in the litigation environment are associated with the issuance of fewer going-concern-modified opinions to stressed companies in recent years. This finding is consistent with the SEC's claim that auditors' behavior in recent years has been influenced by reduced litigation pressures.

On the same idea Marshall A. Geiger, K. Raghunandan, and Dasaratha V. Rama (2005) found that auditors are more likely to issue going-concern modified audit opinions in the period after December 2001 when Sarbanes-Oxley Act was issued.

Andrew J. Rosman, (2011) documented that auditors are adaptive in ill-structured tasks and rigid in structured tasks as predicted by theory. We can easily notice a real subjectivism in the financial auditors' activity with the respect of a new and stronger regulation or for a litigation atmosphere.

An analysis realized by Alnoor Bhimani, Mohamed Azzim Gulamhussen, Samuel Lopes (2009) shows that the risk for entities to reach bankruptcy is much higher when receiving an modified going concern opinion. At the same time it is acknowledged that the performance of the auditors in predicting the bankruptcy is much inferior to that of the risk models: Alnoor Bhimani, Mohamed Azzim Gulamhussen, Samuel Lopes (2003), P. Cybinski (2005)

A certain independence of decision for bankruptcy from going concern modified opinion is also documented by Alnoor Bhimani and Co. (2009) and by Marshall A. Geiger, K. Raghunandan, and Dasaratha V. Rama (2005)

We think the results of our investigations along with the above evidence of the effectiveness of going concern opinion entitle us to look for a better way to use the concept of "going concern".

Conclusions

Relying on the evidence above shown we conclude that a separate or off-audit mission could be performed at the shareholders demand. It might appear too courageous to go for such a proposal but I think in this way a going concern opinion would be much more professional (it appears possible for experts to be involved in the audit process, using the statistical and mathematical models) and more close to the reality. On this purpose the content of the concept of going concern should be changed correspondently. The ISA standard of Going Concern should be adapted concerning the period of "twelve months" and the obligation for auditors to produce a going concern opinion at every engagement as well. From these changes would mainly take advantages the auditors, management representatives and shareholders.

More relevant data will enable us to more deeply argument this proposal. The future researches will be headed toward the improvement of the concept of going concern and, correspondently, the necessary adaptation of the financial audit standards.

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ENVIRONMENTAL REPORTING AT INTERNATIONAL LEVEL STUDY OF THE LITERATURE

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One of the most important areas of development during the last 15 years, as far as accounting is concerned, has been the environmental reporting and accounting, generating interests beyond the restrictions imposed by purely academic discussions or the professional accountants community. The objective of the paper is represented by the analysis of scientific knowledge and existing practices in the area of environmental reporting. Mathews (1997, 2001) and Parker (2005) are one of the most representative studies that examine the evolution and status of researches in the area of accounting and environmental reporting. Because of the fact that reports offered by the traditional financial accounting system are insufficient for reflecting a clear and complete image of the company's environmental impact, I monitored the frameworks or mechanisms of environmental information. Also, the paper analysis the articles treating international environmental reporting, articles published in ISI quoted or BDI indexed journals. The collection and analysis of reporting frames, the interpretation and analysis thereof represent the main instruments used in order to bring to the forefront the main existing reporting frames for environmental information, found at international level. The quantitative, applicative research is used to reflect the current status of researches in the field of environmental reporting, using the non-participative observation to reflect the current status of researches in the field of environmental reporting, by using the non-participative observation, the collection and analysis of articles as main research instruments. The study concludes that environmental reporting continues to represent the main attraction of researchers in the field of environmental accounting. The main reason for researches on environmental reporting is represented by the description, investigation and improvement of practices on accounting and reporting environmental impacts. Although the complexity of researches and existing international and European reporting frameworks have contributed to creating the required premiss for introducing the environmental accountability international standards and regulations, they delay their appearance. The study add value to the existing literature in the field of environmental reporting by presenting and analysing environmental reporting frameworks and important papers that analysis environmental reporting practices.

Keywords: environmental reporting, reporting framework, analysis of literature, applicative research, environmental accounting

JEL Classification: M49 , Q56

I. Introduction

Accountancy researchers and practitioners have been tempted to get involved into environmental related issues at the moment when communities, governments, and even companies have acknowledged the importance of these issues. Environmental protection thus becomes an opportunity for researchers and the accounting profession to prove that they are ahead in contemporary problems and that they can master and maneuver these new opportunities and modern problems (Medley, 1997). The major desideratum of this scientific work is the creation of added value to the existing scientific knowledge (Mustaşa, 2008: 17). The most important objective aimed during the study is represented by the analysis of scientific knowledge and existing practices in the area of environmental reporting. In the attempt to accomplish the set

objective, the conducted research is focused on two levels: *the study of reporting frames for existing environmental information, on European and international level* and *the analysis of articles handling international environmental reporting, articles published in ISI or BDI indexed journals*. By means of this study we have intended to answer the following research questions: Are there sufficient prepared reporting frames at international level? Which are the most important studies approaching the area of environmental reporting at international level? Which are the predominant researches in the area of environmental reporting, what is the purpose of research, as well as the methodology being used?

II. Analysis of Literature

The most important studies bringing upfront the evolution and status of researches in the area of accounting and environmental reporting have been elaborated by Mathews (Mathews, 1997, 2001) and Parker (Parker, 2005).

In 1997, Mathews (Mathews, 1997) created a review of main research directions for the period between 1970 and 1995 in the area of environmental accounting, by analyzing the following aspects: empirical studies, regulatory and philosophical statements, the alternative research current in environmental accounting, the education programs and manuals / accounting profession, the regulatory context. The author has asked himself the following question: *Why accounting academic environment has yet to accept social and environmental accounting?* (Mathews, 1997). Mathews argues the „lack of interest” for this field by the fact that environmental related issue, the scarcity of resources were not „fashionable” at that time, and the methodology used in the attempt to answer certain empirical questions was underdeveloped. Nevertheless, the study outlines the growing trend of researchers in environmental accounting and especially environmental reporting. In 2001, Mathews (Mathews, 2001) approached again the evolution of researches in social and environmental accounting for the period between 1995 and 2000 by analyzing the following aspects: empirical studies, regulatory and philosophical statements, the alternative research current in environmental accounting, the education programs and manuals / accounting profession, the regulatory context. The author outlines the progress of researches in this field by comparison to the previous period 1970-1995 especially in the subfields of environmental audit, environmental management accounting, and social responsibility and considers researches between 1995 and 2000 as more complex and being performed by more experienced researchers. The author suggests that analysis of environmental reporting remains the preferred subfield of environmental accounting.

A presentation of researches in the field of environmental accounting, as appearing in the main accounting journals has also been performed by Lee Parker in 2005 (Parker, 2005), study in which he approached the issue of social and environmental accounting by means of works published in four interdisciplinary accounting journals: *Accounting, Auditing & Accountability Journal (AAAJ)*, *Accounting Forum (AF)*, *Critical Perspectives on Accounting (CPA)* and *Accounting, Organizations and Society (AOS)*, as well as works published in two international journals dedicated to social and environmental accounting: *Social and Environmental Accounting Journal (SEAJ)* and *Journal of the Asia Pacific Centre For Environmental Accountability (JAPCEA)*. Researches in the field of environmental accounting dominate the social accounting researches, and the predominant is represented by national practices or regulations on environmental accounting.

III. Research Methodology

From the point of view of research trends, the present work is included in the main research trend, with a positive and constructive intent. The collection and analysis of reporting frames, the interpretation and analysis thereof represent the main instruments used in order to bring to the

forefront the main existing reporting frames for environmental information, found at international level. The quantitative, applicative research is used to reflect the current status of researches in the field of environmental reporting, using the non-participative observation to reflect the current status of researches in the field of environmental reporting, by using the non-participative observation, the collection and analysis of articles as main research instruments. This research methodology was applied by Muller (Muller, 2010) and Bonaci (Bonaci, 2009) in their studies regarding the current state of research in the field of consolidated financial statements and financial instruments.

IV. Research Results

Gray (Gray, 2006: 3) has severely criticized the relation between financial accounting and sustainability: „Few ideas can be considered as more destructive, for the notion of sustainable planet, as an economical system designed to maximize those aspects being measured by financial reporting”. Gray and Bebbington (Gray and Bebbington, 1992: 6) were describing the traditional accounting system: „...it is very wrong for a system of evaluation, a system that makes things visible and guides the corporate and national decisions, to be able to declare success right in the middle of destructions”. Because of the fact that reports offered by the traditional financial accounting system are insufficient for reflecting a clear and complete image of the company's environmental impact, we have rigorously monitored the frameworks or mechanisms capable to supply a desirable balance of environmental information, in accordance to the company's economic performance, frameworks intended to complete the reports offered by the traditional financial accounting system. The main sources of reports existing at international and European level are Global Reporting Initiative Guidelines, Triple Bottom Line Reporting, Reporting Guidelines for UK Business, The United Nations Global Compact, International Standard Organisation (ISO) and Social Responsibility:

a) On European and international level, Global Reporting Initiatives Sustainability Reporting Guidelines (GRI Guidelines) issued by the World Commission on Environment and Development, enjoys a dominant position, being generally accepted as the best set of practices, as far as sustainable (environmental and social) reporting is concerned. In time, there were three versions of the guidelines: the first version issued in 2000, the second in 2002, and the last in 2006. The GRI reporting framework is intended to serve also as generally accepted framework for the economic, environmental and social performances reporting. It is designed to be used by any company, regardless of size, sector of activity or location and is based on practices encountered within various companies – from small companies to companies with extended activities and geographically dispersed (GRI, 2006: 4).

b) Triple Bottom Line Reporting is based on a triple bottom line approach for sustainability, on the creation of a balance between and economic, environmental and social dimension of sustainability. Such an approach is based on the conception of researcher Elkington, that of setting at the same level the three dimensions of responsibility (Elkington, 1997; Elkington, 2001). The supporters of this idea argue that, if implemented properly, the method supplies information allowing users to assess the sustainability of a company.

c) Reporting Guidelines for UK Business is a guide of voluntary character issued by the Department of Environmental Food and Rural Affairs (DEFRA) in 2006, a sequel of the General Guidelines on Environmental Reporting published in 2001 by the DEFRA and is intended to serve United Kingdom companies in reporting information on environmental impact. The Guide proposes a set of 22 indicators on environmental performance for the UK companies, as well as other information on the company's environmental impact. In 2009, the Department of Environmental Food and Rural Affairs (DEFRA) in a partnership with the Department for

Energy and Climate Change (DECC), published a guide on how companies should measure and report carbon emissions.

d) The United Nations Global Compact (UNGC) is an United Nations initiative to encourage companies to integrate and report social and environmental aspects. The initiative is based on 10 principles, out of which, principles 7, 8 and 9 concern environmental aspects and how companies should report these aspects.

e) International Standard Organisation (ISO) issued in 1996, the ISO 14001 Environmental Management Systems, revised in 2004, as well as the ISO 26000:2010 Guidance on social responsibility, standard which completes very well the GRI Guidelines 2006.

As far as reporting frameworks proposed in other countries outside Europe are concerned, the most representative ones come from Canada, Japan, Australia. These are:

a) CSA STUFF NOTICE 51-333 Environmental Reporting Guidance, issued by the Canadian Security Administrators, presenting information on the environmental impact a company should report, as well as the government structures that should ensure environmental reporting.

b) The Japan Ministry of Environment issued in 2004 and 2007 respectively, the Environmental Reporting Guidelines, introducing a framework for the environmental reporting, on various categories of information, as well as indicators per each category.

c) Australia introduced in 1998 the compulsoriness of reporting environmental information and indicators, based on the Section 299 act, (1)(f), from Australia's Corporations Law. Also, in 2000, the Australian Environmental Ministry published the Framework for Public Environmental Reporting, considered to be highly complex. The Australian Environmental Protection Agency published in 1997 the guideline "Corporate Environmental Reporting. Why and How?"

d) In the United States of America, The International Institute for Sustainable Development; IISD, Deloitte Touche Tohmatsu International and SustainAbility Ltd published in 1993 the first guideline on environmental reporting.

As a result of documentation on frameworks and reporting mechanisms for sustainable or environmental reporting information we can conclude that the most complex framework of sustainable reporting, existing on European and international level, is the GRI Guidelines 2006, offering beside a general reporting frameworks specific reporting frameworks for environmental information on various industries. Even though this framework is highly complex and internationally acknowledged, its enforcement remains voluntary, which determines companies to report environmental information according to GRI Guidelines exclusively in the case when advantages implied by enforcement would supersede costs and disadvantages thereof.

After performing a rigorous documentation on existing European and international reporting frameworks, we have moved to the analysis of articles treating international environmental reporting, articles published in ISI quoted or BDI indexed journals. We have performed the documentation by utilizing the existing computer databases. The articles have been selected based on the following methodology:

1. first of all, we have selected the existing international accounting ISI journals (16 ISI journals: Abacus - A Journal of Accounting Finance and Business Studies; Accounting and Business Research; Accounting and Finance; Accounting Horizons; Accounting Organizations and Society; Accounting Review; Australian Accounting Review; Contemporary Accounting Research; European Accounting Review; Journal of Accounting&Economics; Journal of Accounting and Public Policy; Journal of Accounting Research; Journal of Business Finance & Accounting; Management Accounting Research; Review of Accounting Studies; Revista Espanola de Financiacion y Contabilidad - Spanish Journal of Finance and Accounting), as well as the most representative international BDI journals (5 of the most internationally representative BDI journals: Accounting, Auditing & Accountability Journal; Accounting Forum; Critical

Perspectives on Accounting; British Accounting Review; Journal of Corporate Accounting and Finance).

2. within each journal, we have identified and selected for the period starting in 2000 and until present times, the articles treating environmental reporting. We have selected articles published in the period mentioned, because during this time there has been an extension of this research field in many developed countries, as well as developing countries. We have identified a number of 69 articles treating environmental reporting, published between 2000 and present days.

3. we have analysed the identified articles from the point of view of applied methodology as well as obtained results. The database of analysed articles can be viewed in Appendix 1.

From the analysis of selected articles, we were able to notice the predominance of quantitative, empirical, case studies, interviews or questionnaires type of researches, and content analysis of environmental information reported within the annual statements or other information sources (site, mass media, administrator's report etc.). The main general conclusions drawn from the performed analysis:

- the majority of studies describe reporting practices encountered within companies from different countries, attempting to find determining factors of environmental reporting;
- the obtained results are mixed and contrary. Although the majority of studies present the theory of legitimacy as the determining factor of voluntary environmental reporting in a large number of cases, there are studies which consider environmental reporting more like a company management related issue;
- researches outline the low level of environmental information reported by companies, insufficient for the financial-accounting information users; most information have a general, descriptive character and in many cases, the financial or quantitative information are missing altogether;
- certain studies conclude about the existence of a direct link between environmental information supplied by the companies and the environmental performance within the company, as there are also studies stating that environmental information supplied by the companies do not reflect the environmental performance;
- most studies treating reporting frameworks for environmental information consider the GRI Guidelines as the most complex existing international reporting frameworks for sustainable information;
- there are studies that consider financial performance, company's size, public exposure, debt-to-equity ration or corporate governance system as the determining factors of environmental reporting performed by companies;
- the increase interest and involvement of companies and accounting profession in the environmental reporting, the insertion of compulsory reporting frameworks for environmental information, the improvement of corporate governance systems represent the main arguments that would lead to an increase of reporting and environmental performance within companies.

V. Conclusions

There is a multitude of environmental reporting frameworks at international level, but the applicability thereof does not have a voluntary character. Companies are tempted to use them especially for boosting their image to the users and investors in particular. We believe that the compulsoriness of these frameworks would increase the relevance of environmental information supplied by the companies and would determine them to grant a continuously increasing significance to the environmental impact, mostly to avoid damaging their image for the investors. In Romania, there is no such proposed reporting framework and the Bucharest Stock Exchange listed companies supply environmental impact information without considering any reporting

framework. Environmental reporting continues to represent the main attraction of researchers in the field of environmental accounting, although we can also emphasize the high interest for other research subfields, such as environmental management accounting and environmental audit. The main research current, positive and constructive, dominates the environmental researches, despite the reactions from critics which have not delayed to appear. The main reason for researches on environmental reporting is represented by the description, investigation and improvement of practices on accounting and reporting environmental impacts. Although the complexity of researches and existing international and European reporting frameworks have contributed to creating the required premiss for introducing the environmental accountability international standards and regulations, they delay their appearance.

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Appendix I. Articles analysed

Journal	Index Journal	Author	Year
Abacus	ISI (Vol. 43, Nr. 2, pp. 190-216)	Geoffrey R. Frost	2007
Accounting and Business Research	ISI nici un articol		
Accounting and Finance	ISI (Vol. 46, Nr. 4, pp. 677-695)	Dorothy Wood, Donald G. Ross	2006
Accounting Horizons	ISI (Vol. 13, Nr. 2, pp. 129-145)	S. Douglas Beets and Christopher C. Souther	1999
Accounting Horizons	ISI (Vol. 9, Nr. 3, pp. 34-54)	George O. Gamble, Kathy Hsu, Devaun Kite, and Robin R. Radtke	1995
Accounting Organizations and Society	ISI (Vol. 34, Nr. 1, pp. 1-27)	Aerts, Walter; Cormier, Denis	2009
Accounting Organizations and Society	ISI (Vol. 33, Nr. 4/5, pp. 303-327)	Clarkson, Peter M.; Li, Yue; Richardson, Gordon D.; Vasvari, Florin P	2008
Accounting Organizations and Society	ISI (Vol. 32, Nr. 7/8, pp. 639-647)	Cho, Charles H.; Patten, Dennis M	2007
Accounting Organizations and Society	ISI (Vol. 31, Nr. 8, pp. 763-781)	de Villiers, Charl; van Staden, Chris J..	2006
Accounting Organizations and Society	ISI (Vol. 31, Nr. 3/4, pp. 343-372)	Deegan, Craig; Blomquist, Christopher	2006
Accounting Organizations and Society	ISI (Vol. 29, Nr. 5/6, pp. 447-472)	Al-Tuwaijri, Sulaiman A.; Christensen, Theodore E.; Hughes II, K.E	2004
Accounting Organizations and Society	ISI (Vol. 27, Nr. 8, pp. 763-773)	Patten, Dennis M.	2002
Accounting Organizations and Society	ISI (Vol. 23, Nr. 3, pp. 265-282)	Neu, D. Warsame, H. Pedwell, K.	1998
Accounting Organizations and Society	ISI (Vol. 20, Nr. 6, pp. 457-466)	Niskala, Mikael; Pretes, Michael	1995
Accounting Review	ISI (Vol. 84, Nr. 3, pp. 937-367)	Simnett, Roger; Vanstraelen, Ann; Wai Fong Chua	2009
Australian Accounting Review	ISI (Vol. 15, Nr. 35, pp. 89-96)	Geoff Frost, Stewart Jones, Janice Loftus, Sandra Van Der Laan	2005
Australian Accounting Review	ISI (Vol. 18, Nr. 4, pp. 297-309)	Pamela Kent, Reza Monem	2008

<i>Journal</i>	<i>Index Journal</i>	<i>Author</i>	<i>Year</i>
Contemporary Accounting Research	ISI nici un articol		
European Accounting Review	ISI (Vol. 14, Nr. 1, pp. 3-39)	Cormier, Denis; Magnan, Michel; Van Velthoven, Barbara	2005
European Accounting Review	ISI (Vol. 17, Nr. 3, pp. 537-557)	Holm, Claus; Rikhardsson, Pall	2008
European Accounting Review	ISI (Vol. 11, Nr. 4, pp. 723-740)	Larrinaga, Carlos; Carrasco, Francisco; Correa, Carmen; Llana, Fernando; Moneva, José	2002
European Accounting Review	ISI (Vol. 9, Nr. 1, pp. 7-29)	Moneva, Jose M.; Llana, Fernando	2000
Journal of Accounting & Economics	ISI nici un articol		
Journal of Accounting and Public Policy	ISI (Vol. 23, Nr. 4, pp. 295-304)	Alciatore, Mimi; Dee, Carol Callaway; Easton, Peter	2004
Journal of Accounting and Public Policy	ISI (Vol. 20, Nr. 3, pp. 217-240)	Hughes, Susan B.; Anderson, Allison; Golden, Sarah	2001
Journal of Accounting and Public Policy	ISI (Vol. 25, Nr. 3, pp. 299-331)	Aerts, Walter; Cormier, Denis; Magnan, Michel	2006
Journal of Accounting and Public Policy	ISI (Vol. 22, Nr. 1, pp. 43-62)	Cormier, Denis; Magnan, Michel	2003
Journal of Accounting Research	ISI nici un articol		
Journal of Business Finance & Accounting	ISI (Vol. 33, Nr. 7/8, pp.1168-1188)	Brammer, Stephen; Pavelin, Stephen	2006
Journal of Business Finance & Accounting	ISI (Vol. 28, Nr. 3/4, pp. 327-356)	Gray, Rob; Javad, Mohammed; Power, David M.; Sinclair, C. Donald	2001
Management Accounting Research	ISI nici un articol		
Review of Accounting Studies	ISI nici un articol		
Spanish Journal of Finance and Accounting	ISI nici un articol		
Accounting, Auditing & Accountability Journal	BDI (Vol. 23, Nr. 8, pp. 1032-1059)	Evangeline Eljido-Ten, Louise Kloot, Peter Clarkson	2010
Accounting, Auditing & Accountability Journal	BDI (Vol. 23, Nr. 7, pp. 829-846)	Roger L. Burritt, Stefan Schaltegger	2010
Accounting, Auditing & Accountability Journal	BDI (Vol. 23, Nr. 1, pp. 55-81)	Matthew V. Tilling, Carol A. Tilt	2010
Accounting, Auditing & Accountability Journal	BDI (Vol. 22, Nr. 8, pp. 1211-1257)	Markus J. Milne, Helen Tregidga, Sara Walton	2009
Accounting, Auditing & Accountability Journal	BDI (Vol. 22, Nr. 7, pp. 1029-1054)	Matias Laine	2009
Accounting, Auditing & Accountability Journal	BDI (Vol. 22, Nr. 4, pp. 588-625)	Jan Bebbington, Colin Higgins, Bob Frame	2009
Accounting, Auditing & Accountability Journal	BDI (Vol. 20, Nr. 6, pp. 855-882)	Crawford Spence	2007
Accounting, Auditing & Accountability Journal	BDI (Vol. 20, Nr. 3, pp. 382-402)	Carol A. Adams, Patty McNicholas	2007
Accounting, Auditing & Accountability Journal	BDI (Vol. 19, Nr. 6, pp. 793-819)	Rob Gray	2006
Accounting, Auditing & Accountability Journal	BDI (Vol. 19, Nr. 4, pp. 540-563)	Vanessa Magness	2006
Accounting, Auditing & Accountability Journal	BDI (Vol. 19, Nr. 4, pp. 564-591)	Jill Frances Solomon, Aris Solomon	2006
Accounting, Auditing & Accountability Journal	BDI (Vol. 19, Nr. 2, pp. 228-255)	Alan Murray, Donald Sinclair, David Power, Rob Gray	2006
Accounting, Auditing & Accountability Journal	BDI (Vol. 18, Nr. 4, pp. 492-517)	Janet Luft Mobus	2005
Accounting, Auditing & Accountability Journal	BDI (Vol. 17, Nr. 5, pp. 731-757)	Carol A. Adams	2004
Accounting, Auditing & Accountability Journal	BDI (Vol. 15, Nr. 3, pp. 282-311)	Craig Deegan	2002
Accounting, Auditing & Accountability Journal	BDI (Vol. 15, Nr. 3, pp. 312-348)	Craig Deegan, Michaela Rankin, John Tobin	2002
Accounting, Auditing & Accountability Journal	BDI (Vol. 15, Nr. 3, pp. 349-371)	Gary O'Donovan	2002
Accounting, Auditing & Accountability Journal	BDI (Vol. 15, Nr. 3, pp. 372-405)	Markus J. Milne, Dennis M. Patten	2002
Accounting, Auditing & Accountability Journal	BDI (Vol. 15, Nr. 1, pp. 95-105)	Martin Freedman, A.J. Stagliano	2002
Accounting, Auditing & Accountability Journal	BDI (Vol. 14, Nr. 6, pp. 587-617)	Denis Cormier, Irene M. Gordon	2001
Accounting, Auditing & Accountability Journal	BDI (Vol. 14, Nr. 2, pp. 190-212)	Carol Ann Tilt	2001
Accounting, Auditing & Accountability Journal	BDI (Vol. 13, Nr. 1, pp. 10-26)	Trevor D. Wilmshurst, Geoffrey R. Frost	2000
Accounting Forum	BDI (Vol. 34, Nr. 2, pp. 123-138)	Michael John Jones	2010
Accounting Forum	BDI (Vol. 32, Nr. 1, pp. 1-15)	James Guthrie, Suresh Cuganesan and Leanne Ward	2008
Accounting Forum	BDI (Vol. 34, Nr. 1, pp. 32-45)	Barbara Lynch	2010
Accounting Forum	BDI (Vol. 29, Nr. 1, pp. 27-47)	Jill F. Solomon, Lauren Darby	2005
Accounting Forum	BDI (Vol. 29, Nr. 2, pp. 233-242)	Simon S. Gao, Saeed Heravi, Jason Zezheng Xiao	2005
Critical Perspectives on Accounting	BDI (Vol.16, Nr. 5, pp. 507-533)	Ian Thomson, Jan Bebbington	2005
Critical Perspectives on Accounting	BDI (Vol. 12, Nr. 3, pp. 293-322)	Nola Buhr, Martin Freedman	2001
Critical Perspectives on Accounting	BDI (Vol. 15, Nr. 1, pp. 35-56)	Abu Shiraz Rahaman, Stewart Lawrence, Juliet Roper	2004
Critical Perspectives on Accounting	BDI (Vol. 19, Nr. 4, pp. 450-465)	Charles H. Cho, Jennifer C. Chen, Robin W. Roberts	2008
British Accounting Review	BDI (Vol. 42, Nr. 3, pp. 207-222)	A. Cornelia Beck, David Campbell, Philip J. Shriver	2010
British Accounting Review	BDI (Vol. 36, Nr. 2, pp. 197-218)	Paul Thompson, Christopher J. Cowton	2004
British Accounting Review	BDI (Vol. 37, Nr. 2, pp. 231-248)	J. Hasseldine, A.I. Salama, J.S. Toms	2005
British Accounting Review	BDI (Vol. 35, Nr. 1, pp. 1-18)	Leigh Holland, Yee Boon Foo	2003
British Accounting Review	BDI (Vol. 42, Nr. 3, pp. 223)	Ataur Belal, Stuart Cooper, Robin Roberts	2010
British Accounting Review	BDI (Vol. 42, Nr. 4, pp. 227-240)	Charl de Villiers, Chris J. van Staden	2010
British Accounting Review	BDI (Vol. 39, Nr. 3, pp. 197-210)	Chris J. van Staden, Jill Hooks	2007
British Accounting Review	BDI (Vol. 42, Nr. 1, pp. 17-35)	Mohamed Omran Elsayed, Zahirul Hoque	2010
British Accounting Review	BDI (Vol. 36, Nr. 1, pp. 107-117)	David Campbell	2004
British Accounting Review	BDI (Vol. 37, Nr. 2, pp. 205-229)	Brendan O'Dwyer, David L. Owen	2005
British Accounting Review	BDI (Vol. 33, Nr. 4, pp. 523-548)	Andrew L. Friedman, Samantha Miles	2001
Journal of Corporate Accounting and Finance	BDI (Vol.16, Nr. 5, pp. 59-64)	Stephen R. Goldberg	2005

Source: accomplished by the author

EVALUATION OF ENVIRONMENTAL REPORTING FOR COMPANIES LISTED ON THE LONDON STOCK EXCHANGE

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Environmental aspects have become significant for an increasing number of companies and can have, under certain circumstances, a significant impact on financial statements. A large number of studies can be outlined in time analyzing the variation of environmental reporting (Deegan et al, 2002; O'Donovan, 2002; Holland and Foo, 2003; Nyquist, 2003; Cormier et al, 2005; Yusoff et al, 2006; Jorgensen and Sodorstrom, 2006; Taylor and Shan, 2007; Sumiani et al, 2007). The main objective targeted by this study is the evaluation of environmental reporting for the European companies listed on the London Stock Exchange. In order to achieve the proposed objective, we have completed an longitudinal and transversal analysis of environmental reporting within companies listed on FTSE 100, monitoring first of all the way in which these companies report non-financial and financial aspects related to environmental impact as well as how these reports are being audited. For each annual statement or sustainable report, we have analyzed the level of environmental reporting. The evaluation of how information on environmental impact are being reported is based on four categories of information: information on indicators (technical, financial) that would reflect the environmental impact (water, air, soil), information regarding the financial indicators (investments, assets and other environmental costs, debts and provisions), non-financial information (related to the company's commitment, objectives, programs, management, future perspectives etc), information on environmental audit. Analysing the results we have obtained, the following can be outlined a certain increasing trend on the level and relevance of environmental information supplied for the companies listed on FTSE 100. Only 22 of the analysed companies are reporting the environmental performance indicators recommended by accredited bodies such as the GRI Guidelines (the most complex guidance in this respect). 20 of the 48 analysed companies have audited such information, thus increasing the relevance of this type of information. The paper contribute to the understanding of environmental reporting at international level, creating an image of the quality of environmental informations provided by the most representative companies at international level.

Keywords: environmental reporting, companies, London Stock Exchange, applicative research, environmental aspects

JEL Classification: M49 , Q56

1.Introduction

Gray (Gray et. all., 1996) considers that financial reports within a company, social and environmental reporting and financial accounting included, should be framed in pattern of responsibility (accountability model) according to valid regulations. The first steps suggested by Rob Gray in developing such a system of environmental and social reporting would be the identification of the target group and purpose of such a report, followed by specification of how the company will be able to supply information as a whole. The purpose of the annual report, in Gray's opinion, is to release responsibility towards the society. Due to the fact that information needs cannot be satisfied in full, Gray believes that an environmental balance (eco-balance) and a social balance would be sufficient for those interested to be able to have an image regarding the social and environmental performance. Gray sets the financial, social and environmental dimensions on equal standing, all considered as equally important, both for the company and for

the users. As reporting environmental information remains internationally voluntary, it leads to major differences in the quality and quantity of environmental information reported by companies from various sectors and countries. The economic crisis brought into question the manner in which the systems of reporting ensure a faithful image of the provided information (Groșanu and Răchișan, 2010). Verifying the objectivity of certain information can be achieved by means of audit process. The same as the environmental information presented in the financial statements, the information included in the environmental reports and sustainable reports are also the subject of the audit process. In a study directed by KPMG, on the publication of environmental information, it has been proven that most companies audit their environmental reports independently from their financial statements and that the number of companies auditing their environmental reports is increasing (Bențianu and Georgescu, 2008).

The main objective targeted by this study is the evaluation of environmental reporting for the European companies listed on the London Stock Exchange. In order to achieve the proposed objective, we have completed an longitudinal and transversal analysis of environmental reporting within companies listed on FTSE 100, monitoring first of all the way in which these companies report non-financial and financial aspects related to environmental impact as well as how these reports are being audited.

2. Analysis of Literature

A large number of studies can be outlined in time analyzing the variation of environmental reporting, through time and space, either on company, activity sector or country level:

a) Studies analyzing the variation of environmental reporting within companies from various countries (Fekrat et al, 1996; Stittle et al, 1997; Williams, 1999; Buhr and Freedman, 2001; Holland and Foo, 2003; Nyquist, 2003; Yusoff et al, 2006; Jorgensen and Sodorstrom, 2006).

b) Studies analyzing the variation of environmental reporting in a certain country for various companies from the same sector or different sectors of activity (Gamble et al, 1995; Deegan and Rankin, 1996; Walden and Schwartz, 1997; Cormier and Magnan, 1997; Brown and Deegan, 1998; Larrinaga et al, 2002; Deegan et al, 2002; O'Donovan, 2002; Cormier et al, 2005; Taylor and Shan, 2007; Sumiani et al, 2007).

Within the companies listed on the London Stock Exchange, we have only selected the companies listed on FTSE 100, companies with the highest public exposure, reporting the largest number of voluntary information. From the total of 101 companies listed on the FTSE 100, we have restricted the study to companies operating in industries with a certain environmental impact, as a series of studies have proven that the industry (sector of activity wherein the company operates) influences the environmental reporting (Milne and Patten, 2002). Holland and Foo (2003) have compared in their analysis (UK/SUA) the way in which the legislative framework can influence the performance and the level of environmental reporting within four industries (chemical, mining, oil and gas, constructions and energy), considered to be relevant with regard to environmental impact. Cormier et al (2005) has captured the factors that determine the level of environmental reporting within German companies listed on the stock market, with a sample of 304 companies from the following industries: consumption goods and services, manufacture of industrial products and energy, water, energy, chemical products and medicines, food and drinks industry, high technology industry, heavy industry. All of these studies reflect the increasing level of environmental reporting in developed countries such as Germany, Great Britain, USA, Australia.

3. Research Methodology

We believe to be irrelevant from the point of view of reported environmental information that we analyze the quality and quantity of environmental reporting within the companies operating in

sectors of activity with small risk for pollution. Thus we have eliminated from the sample the companies operating in activity sectors with low pollution risk, such as: banking, investment funds, financial companies, insurance, services, intermediaries, mass-media, telecommunication. As a result, from the total of 101 companies, by eliminating the companies operating in the above mentioned sectors of activity, we have been left with 48 companies in the sample, companies that can be viewed together with their respective sectors, in the Appendix 1. For each analysed company, we have chosen four annual statements (for the period between 2006 and 2009), as well as other reports including possible reporting from the company with regard to environmental impact (sustainable report, environmental report, social accountability report etc.). These reports are available on the website of each company. For the total of 48 companies, we have analysed 192 annual statements as well as 87 other reports (prepared and available only for some companies).

For each annual statement or sustainable report, we have analyzed the level of environmental reporting. The evaluation of how information on environmental impact are being reported is based on four categories of information and the following encoding system (in-house encoding system attempting to consider the relevance of reported information):

I. Information on indicators (technical, financial) that would reflect the environmental impact (water, air, soil). For this category of information we have utilized an encoding system from 0 to 2, as follows:

-0, the company does not report such indicators;

-1, the company reports such indicators, but the reported indicators are not accredited / stipulated by the various reporting standards (GRI Guidelines);

-2, the company reports such indicators, and the reported indicators are accredited / stipulated by the various reporting standards (example: the company applies the GRI Guidelines); also, if the company applies the GRI Guidelines, we have also marked the level of application thereof (for details referring to the levels of application visit <http://www.globalreporting.org/ReportingFramework/ApplicationLevels/>).

II. Information regarding the financial indicators (investments, assets and other environmental costs, debts and provisions). For this indicator, we have used an encoding from 0 to 2, as follows:

-0, the company does not report environmental costs or debts;

-1, the company reports such indicators, but the indicators reported are not separated, not detailed on activities / sources / types of expenses;

-2, the company reports such indicators, and the reported indicators are separated, detailed on activities / sources / types of expenses.

III. Non-financial information (related to the company's commitment, objectives, programs, management, future perspectives etc) that would reflect the company's environmental performance. We have used the following encoding system:

-0, the company does not report such information;

-1, the company reports information of general character;

-2, the company reports information of specific character (indicators, correlated with the company's policy).

IV. Information on environmental audit:

-0, the company does not certify information on environmental impact (does not perform environmental audit);

-1, the company certifies information on environmental impact.

This method of encoding the quality of environmental information is used in the study performed by Comier et al (Comier et al, 2005) and offers the following advantages (Comier et al, 2005: 15):

- It allows the integration of different types of information into a single figure, comparable between companies, in terms of relevance;
- It allows the performance of a qualitative scoring for the environmental information provided by each company;
- Irrespective of the subjectivism of the process, it eliminates non-relevant information, considering only the relevant pieces of information.

4. Research Results

The level of environmental reporting for each category of analyzed information (a. Information on indicators (technical, financial) reflecting the environmental impact (water, air, soil); b. Information on financial indicators (investments, assets and other environmental costs, debts and provisions); c. Non-financial information (on the company's commitment, objectives, programs, management, future perspectives etc) reflecting the company's environmental performance; d. Information on the environmental audit) are presented in the Appendix 1. Analysing the results we have obtained, the following can be outlined:

- From the point of view of progress, we can notice a certain increasing trend on the level and relevance of environmental information supplied for the companies listed on FTSE 100;
- With regards to the information on indicators (technical, financial) reflecting the environmental impact (water, air, soil) we can notice that only 22 of the analysed companies are reporting the environmental performance indicators recommended by accredited bodies such as the GRI Guidelines (the most complex guidance in this respect). From the 22 companies reporting such indicators, only 13 of them have been accredited by this body (the GRI Guidelines) as companies applying (by a level C, C+, B, B+, A, A+) these indicators (the "+" means the indicators are being audited by an external auditor);
- With regards to information on financial indicators such as investments, assets and other environmental costs, debts and provisions, we can notice that the large majority of analysed companies offer adequate details within their annual statements for this type of information;
- As well as in other analysed studies, the non-financial information (related to the company's commitment, objectives, programs, management, future perspectives etc) reflecting environmental performance of the company are being predominantly exposed within the annual statements or sustainable reports;
- With regards to the auditing of environmental information included in the annual statement or the sustainable report, only 20 of the 48 analysed companies have audited such information, thus increasing the relevance of this type of information;
- 70% of the analyzed companies have an environmental committee or a committee in charge with social accountability within their corporate governance structures, a fact which should impact positively on the reported environmental information;

5. Conclusions

Although we have been able to notice an ascending trend on the level and relevance of environmental information supplied within the companies listed on FTSE 100, the majority of information provided have a non-financial character.

Indicators such as emissions level are being reported by the majority of companies, but the relevance of such indicators is questionable, because only 22 of the companies report such indicators on the basis of a framework or reporting guidance and only 27% of them certify such indicators by means of external bodies.

From the point of view of auditing environmental information, more than half of the analysed companies have not audited the supplied environmental information, which raises a question mark with regards to the objectivity of such information.

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Company	Activity	Information on indicators (technical)				Information regarding the financial indicators				Nonfinancial informations				Environmental audit			Environmental committee (2 – has environmental committee, 1 - has internal department, 0 – don't have)				
																	2	2	2	2	2
AFRICAN BARRICK GOLD PLC	Mining	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	2	2	2	1	
AMEC PLC	Oil Equipment	1	1	1	1	2	2	2	2	2	2	2	2	0	0	0	1	1	1	0	
ANTOFAGASTA	Mining	1	1	1	1	2	2	2	2	2	2	2	0	0	0	2	2	2	2		
ASSOCIATED BRITISH FOODS	Food Producers	1	1	1	1	2	2	2	2	2	2	2	1	1	1	1	0	0	0		
ASTRAZENECA PLC	Pharmaceuticals & Biotech	1	1	1	1	2	2	2	2	2	2	2	0	0	0	0	0	0	0		
BAE SYSTEMS	Aerospace & Defence	1	1	1	1	2	2	2	2	2	2	2	0	0	0	0	2	2	2		
BG GROUP	Oil & Gas Producers	2(A+)	2(A+)	1	1	2	2	2	2	2	2	2	1	1	1	1	2	2	2		
BHP BILLITON	Mining	2(A+)	2(A+)	2(A+)	2	2	2	2	2	2	2	2	1	1	1	1	2	2	2		
BP	Oil & Gas Producers	2(A+)	2(A+)	2(A+)	2	2	2	2	2	2	2	2	1	1	1	1	2	2	2		
BRITISH AMERICAN TOBACCO	Tobacco	1	2	2	2	2	2	2	2	2	2	2	0	0	0	0	2	2	2		
BURBERRY GROUP	Personal Goods	2	1	1	1	1	2	2	2	2	2	2	1	1	1	0	2	2	2		
CAIRN ENERGY PLC	Oil & Gas Producers	1	1	1	1	2	2	2	2	2	2	2	0	0	0	0	0	0	2		
CENTRICA PLC	Gas, Water & Multiutilities	1	1	1	1	2	2	2	2	2	2	2	1	1	1	1	2	2	2		
DIAGEO	Beverages	2(A+)	2(A+)	2(A+)	2(A+)	2	2	2	2	2	2	2	1	1	1	1	2	2	2		
ESSAR ENERGY PLC	Oil & Gas Producers	1	1	1	1	2	2	2	2	2	2	2	0	0	0	0	2	2	2		
EURASIAN NATURAL RESOURCES CORP	Mining	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	2	2	2		
FRESNILLO PLC	Mining	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	2	2	2		
GKN	Automobiles & Parts	1	1	1	1	2	2	2	2	2	2	2	0	0	0	0	0	0	0		
GLAXOSMITHKLINE	Pharmaceuticals & Biotech	2	2	2	2	2	2	2	2	2	2	2	1	0	0	0	2	2	2		
IMI	Industrial Engineering	1	1	1	1	2	2	2	2	2	2	2	0	0	0	0	0	0	0		
IMPERIAL TOBACCO GROUP	Tobacco	1	1	1	1	2	2	2	2	2	2	2	0	0	0	0	0	0	0		
INTERNATIONAL POWER	Electricity	1	1	1	1	2	2	2	2	2	2	2	0	0	0	0	2	2	2		
JOHNSON MATTHEY	Chemicals	2(B+)	2(B+)	2(B)	2(B)	2	2	2	2	2	2	2	1	1	0	0	2	2	2		
KAZAKHMYN	Mining	1	1	1	1	2	2	2	2	2	2	2	0	0	0	0	2	2	2		
LONMIN	Mining	2(B+)	2(B+)	1	1	2	2	2	2	2	2	2	1	1	0	0	2	2	2		
MORRISON(WM.)SUPERMARKETS	Food & Drug Retailers	1	1	1	1	2	2	2	2	2	2	2	0	0	0	0	0	0	0		
NATIONAL GRID	Gas, Water & Multiutilities	1	1	1	1	2	2	2	2	2	2	2	0	0	0	0	0	0	0		
PETROFAC	Oil Equipment	1	1	1	1	2	2	2	2	2	2	2	0	0	0	0	0	0	0		
RANDGOLD RESOURCES	Mining	2	2	1	1	2	2	2	2	2	2	2	1	1	1	0	2	1	1		
RECKITT BENCKISER GROUP PLC	Household Goods	2(A+)	2(A+)	2(A+)	2(B+)	2	2	2	2	2	2	2	1	1	1	1	2	2	2		
REXAM	General Industrials	1	1	1	1	2	2	2	2	2	2	2	0	0	0	0	0	0	0		
RIO TINTO	Mining	2(A+)	2(A+)	2(A+)	1	2	2	2	2	2	2	2	1	1	1	0	2	2	2		
ROLLS ROYCE GROUP	Aerospace & Defence	1	1	1	1	2	2	2	2	2	2	2	0	0	0	0	2	2	2		
ROYAL DUTCH SHELL	Oil & Gas Producers	2(A+)	2(A+)	2(A+)	2(A+)	2	2	2	2	2	2	2	1	1	1	1	2	2	2		
SABMILLER	Beverages	2(B+)	2(B+)	2	2	2	2	2	2	2	2	2	1	1	1	1	2	2	2		
SAINSBURY(J)	Food & Drug Retailers	1	1	1	1	2	2	2	2	2	2	2	0	0	0	0	2	2	2		
SCOTTISH & SOUTHERN ENERGY	Electricity	1	1	1	1	2	2	2	2	2	2	2	0	0	0	0	2	2	2		
SEVERN TRENT	Gas, Water & Multiutilities	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	2	2	2		
SHIRE PLC	Pharmaceuticals & Biotech	1	1	1	1	2	2	2	2	2	2	2	0	0	0	0	2	2	2		
SMITH & NEPHEW	Health Care Equipment	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	2	2	2		
SMITHS GROUP	General Industrials	1	1	1	1	2	2	2	2	2	2	2	1	1	0	0	2	2	2		
TESCO	Food & Drug Retailers	2	2	2	2	1	1	1	1	2	2	2	0	0	0	0	2	2	2		
TULLOW OIL PLC	Oil & Gas Producers	2(C+)	2(C+)	2(C+)	1	2	2	2	2	2	2	2	1	1	1	0	2	2	2		

UNILEVER	Food Producers	1	1	1	1	2	2	2	2	2	2	2	2	0	0	0	0	2	2	2	2
UNITED UTILITIES GROUP PLC	Gas, Water & Multiutilities	1	1	1	1	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0
VEDANTA RESOURCES	Mining	2(A+)	2(A+)	2(A+)	1	2	2	2	2	2	2	2	2	1	1	1	1	2	2	2	2
WEIR GROUP	Industrial Engineering	1	1	1	1	1	1	1	1	2	2	2	2	0	0	0	0	0	0	0	0
XSTRATA PLC	Mining	2(A+)	2(A+)	2(A+)	2(A+)	2	2	2	2	2	2	2	2	1	1	1	1	2	2	2	2

Appendix 1. Level of environmental reporting for companies listed at FTSE 100 (accomplish by the author)

A RETROSPECTIVE OF EVALUATION MODELS ON INTELLECTUAL CAPITAL

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In the classical theory of economics, capital is one of the three factors of production, in addition to land and labor, and refers in particular to buildings, equipment, and machinery etc., used for the production of other goods (the term physical capital is also used by the specialized literature) (Brătianu & Jianu, 2006). The present study intend to bring to the forefront the main evaluation methods for intellectual capital, as proposed, supported and criticized at the same time by researchers and practitioners. The study offers response to the following research questions: Which are the advantages and disadvantages of the intellectual capital evaluation methods? And what are the main studies approaching the subject of intellectual capital evaluation at international level? The collection and analysis of intellectual capital evaluation models and the non-participative observation are the main instruments used to bring to the forefront the main international existing evaluation frameworks. The information sources representing the base for these researches are especially constituted by articles published in specialized magazines, both from accounting and economics fields, specialized works relevant to the reference field, legislative documents, official documents, press releases and other documents issued by various national and international bodies. The most representative studies bringing to the forefront the evaluation of intellectual capital are the ones elaborated by Mouritsen et al (Mouritsen et al, 2001), Manea and Gorgan (Manea and Gorgan, 2003), Tayles (Tayles, 2002), Tayles et al (Tayles et al, 2007). The presented approaches offer a general idea on the range of methods, disciplines and operational specializations existing for the evaluation of intellectual capital. Only one of them - Balanced Scorecard – is largely used, while the rest of the methods remain too theoretical or too poorly developed to be universally accepted. We believe that the efforts from the regulation and standardization bodies in the view of intellectual capital evaluation are too small, despite the fact that community shows an increased interest in this sense, many companies being tempted to build their own system of evaluating performances with regards to intellectual capital.

Keywords: intellectual capital, evaluation models, companies, Balanced Scorecard, international level

JEL Classification: M49

1. Introduction

The use of the term „*capital*” alongside with „*intellectual*” evidences the presence of such a capital, different from the financial and physical capital (Peltoniemi, 2006). This concept („*intellectual capital*”) has been initially and soundly defined and argued for by Thomas A. Stewart, one of the editors from the famous American *Fortune* magazine. According to him, intellectual capital is that intangible capital representing the sum of everything each employee knows to do in a company and which can be used for developing its competitiveness (Stewart, 1997). The evaluation of intellectual capital became an important research field for practitioners and researchers ever since the 90s. The epistemological proceedings on the problematic of evaluation can be grouped into two large categories: the positive / regulatory approaches according to which the whole can be best understood by dividing it into isolated pieces and by summing up afterwards the knowledge obtained about each piece; and the interpretive / constructive approaches according to which the whole can be best understood by first hand experimentation, intuition and empathy. The evaluation of intellectual capital is part of the

positive / regulatory theories of knowledge (Curaj, 2008) despite the fact that many researchers today give a distinct importance to interpretive theories or approaches.

By means of the present study we have intended to bring to the forefront the main evaluation methods for intellectual capital, as proposed, supported and criticized at the same time by researchers and practitioners. The study offers response to the following research questions:

-Which are the advantages and disadvantages of the intellectual capital evaluation methods?

-What are the main studies approaching the subject of intellectual capital evaluation at international level?

2. Analysis of Literature

In order to reflect the status of knowledge in this field, we have analyzed the content of the main articles published in ISI⁶⁷ listed international journals for the period between 2000 until present days: *Accounting and Business Research (ABR)*, *Accounting Horizons (AH)*, *Accounting, Organization & Society (AOS)*, *Accounting Review (AR)*, *Australian Accounting Review (AAR)*, *European Accounting Review (EAR)*, *Management Accounting Research (MAR)* and *Asia-Pacific Journal of Accounting and Economics (APJAE)*, BDI⁶⁸: *Accounting, Auditing & Accountability Journal (AAAJ)* and *Critical Perspectives on Accounting (CPA)* and national BDI journals: *Journal of Accounting and Management Information Systems (JAMIS)*, articles approaching the evaluation of intellectual capital by means of various methods or models. From the articles approaching the theme of intellectual capital having been published in the previously mentioned BDI indexed and ISI listed journals, the evaluation models like Skandia, Sveiby, Roos, TBIA, are approached but in a very small ratio, of 4%. The most representative studies bringing to the forefront the evaluation of intellectual capital are the ones elaborated by Mouritsen et al (Mouritsen et al, 2001), Manea and Gorgan (Manea and Gorgan, 2003), Tayles (Tayles, 2002), Tayles et al (Tayles et al, 2007), which approach models like Skandia, Balanced Scorecard, Sveiby, Roos, TBIA.

3. Research Methodology

With regards to research currents, the present work is included in the main research current, with a positive, constructive intent. The collection and analysis of intellectual capital evaluation models and the non-participative observation are the main instruments used to bring to the forefront the main international existing evaluation frameworks. The information sources representing the base for these researches are especially constituted by articles published in specialized magazines, both from accounting and economics fields, specialized works relevant to the reference field, legislative documents, official documents, press releases and other documents issued by various national and international bodies.

4. Research Results

The main methods for evaluation of intellectual capital, proposed, supported and at the same time criticized by researchers and practitioners can be split up into two main categories: generic and individual models. As part of generic models, we would mention: the BSC Model (balanced scorecard), the Performance Prism, the knowledge assets map model, the added value approach, the market or value based approach, Tobin's q model, the Baruch Lev method – association of incomes with assets, the intellectual capital's added value coefficient.

1. The BSC Model (balanced scorecard). In 1992 Robert Kaplan and Davi Norton (Kaplan and Norton, 1992) have launched the BSC model, which has evolved from status of

⁶⁷ ISI listed journals = journals included in the Web of Science: Science Citation Index Expanded, Social Sciences Citation Index s and Arts & Humanities Citation Index

⁶⁸ BDI journals = journals indexed in international databases

evaluation program to a strategies implementation instrument. It represents a set of cause-effect relations amongst the results evaluation instruments and the performance levers from four points of view: financial measures, customer related measures, internal process related measures and measures lied to improvement and development. Presently, Kaplan and Norton underline the significance of visualizing the causality relation between the measures and the objectives seen as strategic maps, representing in fact communication instruments visualizing a company's strategy, the processes and systems required for the implementation thereof. Although Kaplan and Norton consider that each company must chose their own measures, many have criticized the BSC model, deeming it to be limited, because it does not take into consideration the relations with vendors and other important stakeholders.

2.*The Performance Prism*. The main advantage of this model consists in the fact that it addresses all users – not just investors but also customers and other intermediates, employees, suppliers, communities, etc. by adopting two methods in this respect: it considers the requirements of users and what the company wishes from its users. The model's flexibility makes it applicable to any company or organizational element. The attention towards non-corporal levers makes the model useful for companies trying to evaluate their intellectual capital. It also creates a map of various interacting areas of performance, explaining particularly the fact that each of the 5 faces of the prism should be covered in a so-called success map, thus avoiding the limitation, often criticized, of the BSC model.

3.*Knowledge Assets Map Model*. This model approaches the company from the point of view of knowledge assets, being based on the interpretation of the company's intellectual capital elements as a sum of two organizational resources: *stakeholder type resources and structural resources*. The model has been especially created to help entities identify and evaluate intellectual capital and its contribution to the creation of value. Once identified, the important elements of intellectual capital can be easily integrated into more comprising models such as the performance prism.

4.*Added Value Approach*. This evaluation technique has been suggested by Robinson and Kleiner (1996) and it has a framework from two perspectives. The first one utilizes the concept of value chain belonging to Porter. From an industrial perspective, the basic premise is the fact that raw material enters in one end of the chain and, as passing through the processes that will eventually convert it into finished products, value becomes added to it. Production is not the only involved function, raw material having to be purchased and finished products marketed and sold. The entire procedure must also be managed and administered. The key point is that all these internal functions must serve the company's general purpose, that of creating value for its customers. The second part of the framework makes reference to the theory of the economic value added (EVA), rooted in the enterprise finances and developed by Stern Stewart, a New York consultancy company. If the capital entry following any project is larger than the capital cost, then the company should continue that project. The basic objective of EVA is to develop a performance measure that could control the ways in which value can be added or lost within the company.

5.*Market Approach or Value Based*. A simple way to calculate the value of intellectual capital of a company is by considering the difference between its market value – number of issued shares, multiplied by the share's market value – and the net value of its assets. This can be done with a minimum of information and the difference between the indicators is often used as a clue showing that a company more elements of intellectual capital than presented in the annual statements.

6.*Tobin's q model*. The "q" element, proposed by the economist James Tobin represents the ratio between the company's market value and the cost for replacing its assets. In case the later is smaller, then the company records a higher yield than normal. The technological

assets and human capital have been traditionally associated with high q values. One might claim that Tobin's q method is highly more accurate than the method based on value because it rather uses the replacement cost than the historical cost. However, finding these replacement costs is much more difficult than the simple reduction to a balance sheet. The model also presents several disadvantages, just like the other models, because it uses market value as a key measure. Tobin's q model cannot offer an exact figure for the individual intellectual assets. Their actual value consists in analyzing the trends; a decreasing q implies that the company does not manage its intellectual assets in an efficient way or that the investors' attitude has changed.

7.Baruch Lev Method – association of incomes with assets. Baruch Lev, professor at Stern School of Business, New York University, has proposed a method that associates the incomes with the assets generating the incomes. The method uses both gains and assets as data sources and does not focus exclusively on assets. By associating assets with gains, companies could obtain a turnover they can use to make comparisons with other companies or merely to indicate whether their incomes from intellectual assets are decreasing or increasing. However, like some of the previous methods, it leads to a single figure for intellectual assets and does not consider individual components.

8.The Intellectual Capital's Added Value Coefficient. This method calculates the difference between sales and all inputs, divided by the intellectual capital, which is estimated as the total labor expenses. The higher the rate the more efficient the company in utilizing its intellectual assets. The main advantage of this approach is simplicity. Also, a company would be able to inefficiently utilize its labor resources, but that aspect might be covered by a more efficient use of other resources leading to a similar ratio.

Certain companies, in particular the Scandinavian ones, have developed their own evaluation methods. They assume at least a part of their consultancy income and therefore have a commercial interest in promoting their models. In other parts, the development and use of intellectual capital models is purely occasional. Continental Europe is probably the most advanced in this area, unlike USA and Great Britain, which show less advancement. The countries from the Pacific coast, such as Australia and Japan have recently shown significant progress on proposing intellectual capital evaluation models. Hence, among the individual models, we would mention: the Skandia Navigator Model, the Ericsson "cockpit communicator" Model, Celemi's Model for monitoring non-corporal assets (Sveiby), Ramboll's holistic Model and the IQ Company Model proposed by Bates Gruppen, which models we will detail as follows:

1.The Skandia Navigator Model. Of all intellectual capital evaluation systems, the Skandia Navigator model, developed in 1994, is probably the most familiar, even though it is applied exclusively by Swedish companies. This model presents four main dimensions of activity: financial dimension; customer dimension; process dimension and renewal and development dimension. In the center thereof lies the human dimension leading the entire model. There is a big resemblance to the BSC model. Indeed, Sveiby (1998) sees the Navigator as a combination of BSC and Celemi's non-corporal assets monitoring. Edvinsson claims that the Navigator model can be regarded „as a house”. „*The financial dimension is the roof, the customer orientation and process dimension are the walls, the human dimension is the soul of the house, and the renewal and development dimension represent the foundation. With such a metaphor, renewal and development become the critical bottom lines for sustainability*" (Edvinsson, 1997). Edvinsson compared intellectual capital with a tree. The ripe fruit resulting from seasonal efforts can be noticed in its corona – the annual financial report. „The human nucleus" from the trunk is protected by the bark of customer relations and working routines. Research and planning, which is needed for the tree to survive droughts and cold, is given by the root and its interaction with soil. In a reality marked by the

quick and whimsical changes of business environment, the roots area is where the most important activities bearing fruits in the future can be encountered (Curaj, 2008). The value scheme developed by Skandia contains both financial and non-financial elements combined, with the purpose of highlighting a company's market value.

2. *The Ericsson "Cockpit Communicator" Model.* Ericsson, the Swedish telecommunications company, has developed a commercial product called "cockpit communicator", also based on the BSC model - Balanced Scorecard, having five perspectives extremely similar: innovation, employees, process, customers and financial. Each perspective is represented by an aircraft cockpit and each having its own indicators. Monitoring the relevant entries for each indicator, the communicator suggests actions that can match the company's strategies.

3. *Celemi's Model for Monitoring the Non-corporal Assets (Sveiby).* An international professional training consultancy company, Celemi, monitors three large groups: customers (external structure); people (competence) and the company (internal structure). The three key indicators are being monitored within each group, specifically development / renewal, efficiency and stability, each with its own performance indicators.

4. *Ramboll's Holistic Model.* Just like for other northern models, Ramboll's holistic model includes key fields where certain performance indicators are being managed. These key fields lead to three sets of results – customer, employee, and company – and all three combine to create financial results. The key fields are: values and management, strategic processes, structural resources as well as consultancy services. For example, the performance indicators for human resources are: personnel structure, personnel turnover and development of competences. These key performance indicators (KPI) are then divided. The ones related to creating competence, for example, are comprised of additional expenses, except salary, for professional training, amount spent on attending courses and amount invested in the employees.

5. *The Company IQ Model, proposed by Bates Gruppen.* Bates Gruppen is a Norwegian branch of Bates Worldwide and is part of the Cordiant Communications Group. Bates Gruppen has recently suggested a method which includes exclusively non-financial evaluation models. The Company IQ Model allows a company to compare its intellectual assets with those of a similar company. This method is more than an evaluation system; it requires the company to identify highly valuable assets, unique capabilities and intellectual related elements. While calculating its IQ, a company can discover it produces goods and supplies services which are similar to a competitor or contain features of low value for the customers. This will provide the company with a complete list of indicators, thus allowing it to take measures towards having a direct impact on its abilities to maximize profit.

Even though the previously presented types of models have been the subject of debate in time, we often ask ourselves „*Why is it so difficult to evaluate intellectual capital?*” The first reason is of historical nature. Accounting rules, although revised regularly, have been initially intended for certain assets like technical tools and factories - corporal elements representing an income source in the industrial age. Secondly, certain intangible assets are difficult to evaluate. Creativity, for example, lies at the core of a knowledge creation process, but remain an unpredictable process which can generate results in a similar unpredictable way. This aspect leads us to the third reason: the idiosyncrasy of intellectual capital. That which is valuable for a company can be useful for another company, various evaluation systems resulting, making difficult the comparison between companies and sectors.

5. Conclusions

Intellectual capital can ultimately have two dimensions: a static and a dynamic character, explained as follows (Meritum, 2002): „*Non-corporal resources belonging to a company, as*

static notion, can be evaluated at any moment. Hence, employees competences (human capital), intellectual property rights (structural capital) customer satisfaction or vendor agreements (relational capital) can be included in this category. Non-corporal resources can also be analyzed from a dynamic perspective. Companies develop activities in order to purchase or manufacture in-house non-corporal resources, in order to sustain or improve the existing ones and to evaluate and monitor them. These dynamic activities involve as such an allocation and use of resources which are not always expressed in financial terms, and therefore, can or cannot appear in financial reports.” The dynamic nature of intellectual capital means that its composing elements do not have an independent value, but gain one if included in a system. In other words, the elements of intellectual capital and especially the interaction between them generate value in a company. For example, a company can have good programming skills allowing it to create software. However, the company might have a small value unless it has a powerful distribution network, loyalty and devotion from its employees and a powerful trademark. This dynamic combination of non-corporal elements is often the recipe for the success of companies such as Microsoft, where the value of intellectual capital represents more than the sum of its individual elements.

The presented approaches offer a general idea on the range of methods, disciplines and operational specializations existing for the evaluation of intellectual capital. Only one of them - Balanced Scorecard - is largely used, while the rest of the methods remain too theoretical or too poorly developed to be universally accepted. We believe that the efforts from the regulation and standardization bodies in the view of intellectual capital evaluation are too small, despite the fact that community shows an increased interest in this sense, many companies being tempted to build their own system of evaluating performances with regards to intellectual capital.

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THE DEPRECIATED REPLACEMENT COST – REPRESENTATION OF FAIR VALUE IN ACCOUNTING. TENDENCIES AND PERSPECTIVES IN THE ROMANIAN ACCOUNTING PRACTICE

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The Romanian accounting system has gone through a radical reform in the last years, but the preoccupations for improving and developing Romanian accounting still continue. In order to preserve the general objective of rendering available to financial managers and analysts a common internationally agreed framework for drawing up and presenting financial statements, accounting professionals have the duty to contribute to the elaboration of accounting policies capable to transform accounting in an essential leadership instrument. Under these circumstances, there is the attempt to identify a dialogue form between accounting norms and policies, between the freedom to choose accounting procedures and the obligation to provide users with credible relevant information. The present work aims to make a thorough analysis of fair value adjustment – version of the depreciated replacement cost – which is specific to specialized corporal immobilized assets seldom commercialized on the market, by starting from the approaches and concepts existing in specialized literature, while afterwards it will carry out a comparative study between normative provisions and the concrete reality of Romanian accounting practice. Aware that fair value adjustment represents the profession of assessment experts, the presents work aims to present the potential models for quantifying fair value, which is an useful information basis for accounting professionals who have one more instrument at their disposal, for effectively and practically applying IRFS norms.

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Classification J.E.L.:M41

I. Introduction

Currently, national destinies are strongly influenced by the forces of the world global competition [1], so that the decisions of management, investment and of financial nature have international implications. Since most of these decisions are based on accounting information, it is necessary a good knowledge of national and international accounting norms, so that business can go well. Thus, it can be witnessed a transformation of the accounting system, which has to insure to information users – investors/shareholders, creditors, a.s.o. – clear, credible and internationally comparable sources, so that their decisions are based on strong grounds. In the past, at a global level, there were two opposed accounting traditions: the Anglo-Saxon one, which is in the interest of investors and has the main objective of comparing financial performances, and the continental one, which is controlled by the state and oriented towards all the partners of an entity – fiscal administration, creditors, employees, owners, a.s.o. While the continental system agrees with the measurement at a historical cost, the Anglo-Saxon one proposes the adoption of fair

value. For those specialized immobilized assets, such as the equipments seldom commercialized on a market, of which too little information is known, fair value is estimated by measuring the **depreciated replacement cost**. The approach based on cost is founded on the statement that a prudent and informed purchaser would pay for an asset at most the purchasing and the production cost of a replacer with the same use; it is all about the current amount of money necessary for building up or buying a new substitute with the same use. If the immobilized asset is not new, from the gross current cost shall be deducted all the depreciation forms which had been attributed to it by the assessment date. In its simplest form, the cost method can be represented in the following way:

Gross cost – Depreciation = Value (called net replacement cost)

According to Valuation Standards, the starting point in adjusting value through the approach based on cost is either *the gross reproduction cost*, or the *gross replacement cost*, or a combination between the two.

Given that the reproduction cost is the current cost involved with reproducing an identical copy of an asset, by using the same materials or similar ones, and since market conditions contribute to analyses over some similar but not identical assets, we agree with the international regulator who opted for the adjustment replacement cost. When it comes to the approach based on cost, the assessment expert compares the immobilized asset with another one which may replace it.

II. Research methodology – presentation of methods

The most used method for determining the replacement cost for assets such as specialized equipments is the **device method**; at the same time, for the similar installations and equipments, of various dimensions, it is used when it come to the valuation of net replacement cost also the **method cost-capacity**.

II.1 The device method, also known as the **summing up method**, involves “breaking” the analyzed immobilized asset in components and valuating the cost of all its individual components, so that the sum of the components will reflect the *new cost* of the whole. The components cost involves not only *direct costs*, represented by those expenses related to materials, employees and by those ordinary expenses corresponding to the purchasing and installing of the asset, in order to bring it to the estate of functional use, but also by *indirect costs* normally required by the purchasing and installing of an asset, which are not generally included in the invoice issued by the seller.

The information about the cost and reference materials, necessary for adjusting the replacement cost, will make up a data basis rendered available to the specialized assessor and should contain: catalogues of producers and dealers, price lists and equipment specifications; specification manuals of manufacturers; price lists of manufacturers; price lists of sellers; published price guide books a.s.o. The materials may be obtained from: producers and sellers; dealers of new and used materials; exhibitions and show rooms; published price guide books, invoices from customers; newspapers; auctions; older files and registers; universities; public libraries; computer data bases; internet; by telephone, letter or personal contact; various free publications related to equipments such as Yellow book, local newspapers or news publications within the field. In particular circumstances, for instance when an equipment is produced abroad and the local dealer cannot be found, it is preferable to contact the technology or the maintenance department of the customer, since customers have to buy spare parts from somewhere. When the information cannot be obtained in this way, then it shall be contacted the consulate of the country where the equipment was produced. It results from here the need for a data basis at the disposal of the assessor, complete and permanently updated, which can be a working instrument for founding and upholding a relevant and credible assessment of value.

After establishing the gross replacement cost, the specialized assessor shall deduct *all the depreciation forms* attributable to the asset, in order to measure **the net replacement cost**. For mobile goods, there are involved all the wear and tear forms: physical, functional, economical. Depreciation represents the loss of value from various reasons, including factors of a *physical and functional type, of exploitation and economical depreciation*.

Wear and tear represents the loss of value or usability of an asset, caused by use, deterioration, exposure to various atmospheric agents, overuse and other similar factors. When an inspection is carried out for classifying an asset, it is necessary to pay a great attention to the latter's physical state. As a technique of quantifying wear and tear, it can be reminded the analysis *age/life span*.

If speaking about the concepts which can be used during the analysis, there can be reminded: *chronological age; effective age; normal useful life span; useful life span left; physical life span; physical life span left; economical life span; economical life span left*.

In relation to the indicators presented, from a strictly conceptual point of view, the wear and tear degree can be calculated by using of the following formulas:

$$WT_f (\%) = \frac{V_{cron}}{DVF} 100; WT_f (\%) = \frac{VEf}{DVUN} 100; WT_f (\%) = \frac{VEf}{VEf + DVUR} 100.$$

Functional depreciation represents the loss of value or usability of an asset, caused by inefficiencies or non adequacies in the quality of the asset, when the latter is compared with a replacement asset which is more efficient and/or less expensive and produced with modern technology. In other words, the loss of value is caused by conditions inherent to the asset, so that the excess of capacity represents a potential form of functional depreciation. The quantification of functional depreciation is based on at least two ways:

- the first one is represented by *the difference between the gross reproduction cost and the gross replacement cost*, being used for measuring functional depreciation caused by the *costs of excess capital*;

- the second one is the consequence of the functioning of some assets such as machines and equipments with exploitation expenses which are bigger than their modern substitutes and is also known as technological depreciation, its measurement being provided by *the absolute annual measure of surplus exploitation expenses of an asset, updated at an adequate rate during the useful life span left* (penalty for functional depreciation from exploitation).

Economic depreciation, also called external depreciation, represents the loss of value or of the full usability of an asset, caused by factors which are external to it, such as: the increased cost of raw materials, labour force or utilities (but without the corresponding increase of the selling price of the product); the low demand registered for the product in question; increasing competition; environmental law, a.s.o.

Among the ways of estimating economical depreciation, there can be found:

- *disutility method* (expressed in percents);

- *the method of updating/capitalizing additional expenses caused by external factors*, which is similarly applied in the case of the calculi relative to the measurement of functional depreciation from exploitation.

Example no. 1: The object of the analysis is a plane YR PMS, type AN 2, fabricated in 1998 in Ukraine and purchased again by the Romanian company SC ARIPI AURII SA. According to the owner's statements, it results that the plane AN2 is used only for irrigations and fertilizations in agriculture, there being carried out in time all the periodical revisions; it can be noticed at the same time that a capital reparation of the plane has not been yet carried out. There is known about the plane the following information: AN 2; developed for agricultural works; the technical condition of the plane requires capital reparations at the cell, airscrew, envelopes.

Specification	U/m	Cell	Motor	Airscrew
Fabrication date		1998	1997	1995
No. of functioning hours since the plane was put in use (Vef)	Hz	2.000	847	4.500
Hours of flight remaining by the time the plane is out of use	Hz	14.000	5.353	3.500
Total hours of flight (DVUN)	Hz	16.000	6.200	8.000

In order to estimate the fair, market value of the plane at 31.03.2010, the society resorts to the services of a specialized assessor. Taking into account that the type of the plane assessed is no longer fabricated in the present, and that the types of planes fabricated are different from the type of plane assessed, both from the point of view of the construction and from the point of view of the technical-functional characteristics, it will be used the method based on for assessing fair value. The main elements of the plane – cell, motor and airscrew – are used according to different rules, so that in estimating the degree of wear and tear the starting point will be the percent value of each component, that is: 75% for the cell, 20% for the motor, 5% for the airscrew. At the same time, in order to calculate functional depreciation, it is also necessary to know the reproduction cost estimated by the assessor, which is, on the basis of the information available, of 168.000 €.

In order to determine the replacement value of the plane, it has been used *the method based on gross replacement cost*, the value of the plane being determined by diminishing the updated value (again), according to the formula:

$$V_{ap} = [V_o x (1 - U_f)] x (1 - U_m) \quad (1) \quad \text{where:}$$

V_{ap} - updated value, calculated by updating the entrance value,

U_f - wear and tear,

U_m - obsolescence generated by functional non adequacy.

It is first adjusted the measure of the wear and tear, according to the formula:

$$U_f = \frac{\sum_{i=1}^n u_i v_i}{\sum v_i}, \quad \text{where } u_i = \text{physical depreciation of the component } i \text{ calculated with the help}$$

of the formula:

$$u_i (\%) = \frac{VEf}{VEf + DVUR} 100$$

v_i = percent value of the component in respect to the total value.

It is determined the wear and tear on groups of components, such as it follows:

$$U_c = \frac{2.000}{16.000} = 12,50 \%; \quad U_m = \frac{847}{6.200} = 13,66 \%; \quad U_e = \frac{4.500}{8.000} = 56,25 \%.$$

The wear and tear for the whole plane will be:

$$U_f = \frac{(U_c x 75 + U_m x 20 + U_e x 5)}{100} = 14,92 \%$$

The obsolescence which underlines the depreciation of the plane as a consequence of technical progress, both from the perspective of the cost reduction and from the perspective of new types of planes fabricated, is expressed by means of the relation:

$$U_m = 1 - \frac{C_0}{C_1}, \quad \text{where}$$

C_0 = initial cost of the plane, C_1 = reproduction cost.

The initial cost of the plane estimated in € is of 155.000 u.m.; for such types of assets, the wear and tear is generally between 1 and 10%.

$$U_m = 1 - \frac{155.000}{168.000} = 7,7 \%$$

The determination of the value of the plane – net replacement cost, is made by replacing the data in the following formula (1):

$$V_{ap} = [155.000 \times (1 - 14,92\%)] (1 - 7,7\%) = 131.874 \times (1 - 7,7\%) = 121.720 \text{ €}$$

II.2 The method cost-capacity is used for measuring the net replacement cost for similar installations and equipments, of various dimensions, precisely for pointing out the reality according to which the costs of similar installations or of equipment parts of different dimensions vary exponentially, according to dimension. Below it is presented an example of how the net replacement cost is calculated according to such method.

Example no. 2: In order to determine the replacement cost on the basis of the *method cost-capacity*, let us consider the following information about a manufacturing installation: date of the net replacement cost measurement – 31.03.2010; date when the installation is put into function – 31.03.2004; total estimated life span – 20 years; capital repair carried out in March 2006 has reestablished 80% of the normal life span; the production capacity projected is of 16.000 t/year; the current and future capacity exploitation is of 15.000 t/year; the exploitation expenses for fuels bigger than a modern substitute, with 12 tones of gas-oil at year, at a price of 5.000 lei/t; the quota of income tax is of 16%; the selling price of a modern installation substitute of 19.000 t/year is of 2.100.000 lei; the exponent factor is 0,7; the updating rate is of 13%.

The following steps are carried out:

a) *determining the replacement cost on the basis of cost-capacity method:*

$$\frac{C_2}{C_1} = \left(\frac{Q_2}{Q_1} \right)^X, \quad \text{where}$$

C_2 - not known replacement cost of the asset undergoing valuation;

C_1 - known replacement cost of capacity Q_1 ; Q_2 - capacity of the asset undergoing valuation;

X - exponent factor, which expresses the fact, acknowledged through detailed analyses, that not all cost elements of an asset vary directly proportional with their dimension.

$$\frac{C_2}{C_1} = \left(\frac{16.000}{19.000} \right)^{0,7}; \quad C_2 = 2.100.000 (0,8421)^{0,7} = 21 \times 0,88665 = 1.861.965 \text{ lei}$$

b) *determination of the wear and tear by taking into account the following parameters:*

- total life span estimated – 20 years;
- reestablished life span, capital reparation – 20 years x 80% = 16 years;
- number of years from the capital reparation – 4 years;
- useful life spam left (DVUR) – 16 years - 4 years = 12 years.
- effective age (Vef) – 20 years - 12 years = 8 years.

$$U_f = \frac{VEf}{VEf + DVUR} 100 = \frac{8}{20} 100 = 40\%. \text{ The wear and tear is } 1.861.965 \times 40\% = 744.786$$

c) *determination of functional depreciation:*

- surplus exploitation expenses 12 tones x 5.000 lei/t = 60.000 lei/year
- net surplus exploitation expenses 60.000 (1 – 0,16) = 50.400 lei/year
- the updating factor is of 5,9176
- net updated surplus exploitation expenses 50.400 x 5,9176 = 298.247 lei

d) *determination of economical depreciation*

$$D_e = \left[1 - \left(\frac{15.000}{16.000} \right)^{0,7} \right] 100 = \left[(1 - 0,9375)^{0,7} \right] 100 = (1 - 0,95582) \times 100 = 4,42\%$$

The replacement cost is established as it follows:

Gross replacement cost	1.861.965 lei
Wear and tear	744.786 lei
<u>Functional depreciation</u>	<u>298.247 lei</u>
Cost after physical, functional depreciation	818.932 lei
Economical depreciation (4,42%)	36.197 lei
Replacement cost	782.735 lei

III. Results of the research

Our attempt of presenting the working steps for measuring fair value have had the objective of realizing the possibility of applying these concepts also by accounting professionals, and not only by assessment experts. The main results, and respectively, limitations emerging from the research carried out, are:

- although international norms make no reference to the way fair value is measured when there is not enough information on the market about its estimation, by means of the adjustment techniques previously presented and used by valuation standards, it can be measured such an aggregate;
- the concepts and adjusting techniques applied are familiar to accounting professionals from Romanian entities;
- and, although it is possible for accounting professionals to show opposition to adjusting and applying the analyzed instruments, which constitute the profession of assessment experts, still, any future expert will also resort to and use the techniques presented, also due to his role in an entity.

IV. Conclusions

The detailed presentation of the methods for adjusting the depreciated replacement cost – together with the concrete examples offered, constitutes an additional working instrument rendered available to accounting professionals, who therefore have one more element for applying the provisions of the IRFS norms. Although they are borrowed from valuation, such norms can be applied also by other professionals than the assessment experts, by observing the working stages already mentioned. Adjusting fair value in the form of the depreciated replacement cost will no longer represent in the future only the profession of assessment experts. Although the latter are the main persons to have at their disposal a mix of information which they afterwards submit to adjustment for estimating fair value, we anticipate a greater openness of accounting professionals towards putting in practice IRFS norms. This is also a result of the fact that Romanian entities, under the current circumstances of deep economical crisis, will no longer afford to resort, whenever they have to establish fair values for patrimonial elements, to external assessment experts, not to mention that is also less probable for them to constitute a distinct

valuation department which involves considerable costs. There are nonetheless some limitations such as: the lack of motivation of accounting professionals to measure fair value, also as a result of fiscal limitations restraining the practices agreed by international norms. We consider that Romanian entities will manage to line up with international accounting practices in measuring fair values, even if they will have to overcome some limitations and constraints.

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THE PLACE OF THE EMERGING ECONOMY OF ROMANIA INSIDE THE EUROPEAN UNION ECONOMIES IN TERMS OF FTSE CRITERIA

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The importance of this research lies from the need to know the economies developed, emerging and frontier of the European Union and the mode of their manifestation according to the market indicators. Consequently, we had in mind a presentation of the economies in the categories mentioned above framed in terms of market criteria used by FTSE Group, a provider of stock market indices and associated data services. Using data from a series of reports published by FTSE we made an analysis of how each of the considered economies and in particular Romania, acts according of these. Was taken into consideration criteria as: market and regulatory environment (formal stock market regulatory authorities actively monitor market; fair and non-prejudicial treatment of minority shareholders; non or selective incidence of foreign ownership restrictions; free and well-developed equity market; no objections or significant restrictions or penalties applied on the repatriation of capital; free and well-developed foreign exchange market; non or simple registration process for foreign investors); custody and settlement (settlement-rare incidence of failed trades; custody-sufficient competition to ensure high quality custodian services; clearing & settlement; stock lending permitted; settlement-free delivery available; custody-omnibus account facilities available to international investors); dealing landscape (brokerage-sufficient competition to ensure high quality broker services; liquidity-sufficient broad market liquidity to support sizeable global investment; transaction costs-implicit&explicit costs to be reasonable and competitive; short sales permitted; off-exchange transactions permitted; efficient trading mechanism; transparency); derivatives (developed derivatives market). The final part of the paper is reserved to the understanding of the mode in which each of the considered economies of the European Union, including Romania and regardless of what category they belong (developed, emerging or frontier economies) behave in relation to the above criteria used by the FTSE in relation with the market quality. In terms of research methodology, this took into account the data collection through the observation method. This method use, as research tool, the observation guide. We have also had regard to the proper definition of the concepts and their operationalization in order to bring to the fore a number of relevant indicators for the economies of the European Union.

Keywords FTSE group, emerging market, frontier market, market criteria

Jel classification G10, O 52

This paper has, as main goal, to present certain matters related to Romania's position as frontier economy, inside the European Union economies according with the FTSE classification in terms of Global Equity criteria. These was structured into five groups in the following manner: first reveals aspects looking Market and Regulatory Environment, the second is about the Custody and Settlement, Dealing Landscape make the object of the third group, and the elements considered by the fourth and fifth group are making reference to the Derivatives and, also, to the market size. Are also fallowed, through the present paper, the extent to which the developed, emerging and frontier countries of the EU meets or not the presented criteria.

1. The types of promoters of the EU economies and the assessment criteria promoted by FTSE Group

Generally speaking, Emerging Markets (EMs) was previously defined in the economic literature as nations with social or business activity in the process of rapid growth and industrialization which increase their number from 28 in 2006 to over 40 in 2010. Due to their faster development and to their openness towards the realisation and adaptation at the new demands of the free market, to the foreign direct investment attraction and to the technology transfer, these economies are becoming major players on the global economy arena which tend to change the global economy's orientation. As a result, a number of bodies and international publications (FTSE group, MSCI Barra, S & P, The Economist, etc..) manifests a continuing concern for how these economies evolve and classifies them according to a number of criteria, each considered of maximum relevance for each mentioned group or publication. Thus, the FTSE group, created in 2002 as a British provider of stock market indices and associated data services identified in 2010 a number of 48 emerging markets, MSCI Barra established for May 2010 the existence of 21 emerging markets, S & P established in December of that year 19 countries with the title of emerging markets and Dow Jones increased this number to 35 in May 2010. Besides the emerging markets encountered on the European plan also exist the notion of Frontier/Secondary Emerging Markets (F/SEMs) which is an economic term commonly used to describe a subset of emerging markets (Ems). Frontier markets (Fms) are investable but have lower market capitalization and liquidity than the more developed emerging markets. The frontier equity markets are typically pursued by investors seeking high, long term returns and low correlations with other markets. The implication of a country being labeled as frontier is that, over time, the market will become more liquid and exhibit similar risk and return characteristics as the larger, more liquid markets represented by the developed emerging markets. The ensemble of the market economies met in the European Union area is complemented by the developed markets (DMs) which are those countries that are thought to be the most developed and therefore less risky in terms of investing. To be more specifically, we can say that through investment we understand the commitment of money or capital to the purchase of financial instruments or other assets so as to gain profitable returns in the form of interests, dividends, or appreciation of the value of the instrument (capital gains) (Sullivan and Sheffrin 2003: 271). After the identification of the categories of markets which manifest their action in the economic zone of the European Union the present paper expose the mode in which the promoters of this area economies are positioned in relation to a set of indices calculated by FTSE Group and which are integrative part of the FTSE Global Equity Index Series (GEIS). These indices are based on certain *criteria* created on the beginning by the FTSE group from a number of 25 new frontier markets, which has been screened using its established country classification methodology that assesses markets against the size requirements, basic governance and market infrastructure elements required by international institutional investors. Presently, the indices are calculated in real-time and are designed to be used as the basis of financial products such as *ETFs* (an investment fund traded on stock exchanges and which holds assets such as stocks, commodities, or bonds, and trades close to its net asset value over the course of the trading day), *mutual funds* (a professionally-managed type of collective investment scheme that puts money from many investors to buy stocks, bonds, short-term money market instruments, and/or other securities), and *derivative products* (as form of alternative investment it represent a financial instrument whose value depends on other, more basic, underlying variables (Hull 2006: 1) such as: the price of another financial instrument (the underlying asset) (McDonald 2006: 54), interest rates, volatilities, indices, etc., the most common derivatives being swaps, futures, and options). The identification of the origin of the criteria is followed by the presentation of the ones used by the FTSE group for a market. These are: there must be a formal and independent stock market authority that actively monitors the

market; there should be no objection to or significant restrictions or penalties applied on the repatriation of capital and income; transparency; there should be market depth information, visibility and a timely trade reporting process and a requirement of international price dissemination; settlement (there should be a rare incidence of failed trades); clearing and settlement period shorter than T+7 (and greater than T+1). For a better understanding we present the mentioned criteria (detailed in Table 1) with the specification that to describe the country's status are necessary to be verified: all the criteria (for the developed markets), 15 criteria (for the advanced emerging markets), 9 criteria for the secondary emerging ones and 5 criteria for the markets of frontier.

Table 1. The quality market criteria used by the FTSE classification

Criteria used by the FTSE classification	D	AE	SE	F
1. Market and Regulatory Environment				
1.1. Formal stock market regulatory authorities actively monitor market	x	x	x	x
1.2. Fair and non-prejudicial treatment of minority shareholders	x	x		
1.3. Non or selective incidence of foreign ownership restrictions	x	x		
1.4. Free and well-developed equity market	x	x		
1.5. No objections or significant restrictions or penalties applied on the repatriation of capital	x	x	x	x
1.6. Free and well-developed foreign exchange market	x	x		
1.7. Non or simple registration process for foreign investors	x	x		
2. Custody and Settlement				
2.1. Settlement - Rare incidence of failed trades	x	x	x	x
2.2. Custody-Sufficient competition to ensure high quality custodian services	x	x	x	
2.3. Clearing & settlement - T +3 or shorter, T+7 or shorter for Frontier	x	x	x	x
2.4. Stock Lending is permitted	x			
2.5. Settlement - Free delivery available	x			
2.6. Custody - Omnibus account facilities available to international investors	x	x		
3. Dealing Landscape				
3.1. Brokerage - Sufficient competition to ensure high quality broker services	x	x	x	
3.2. Liquidity - Sufficient broad market liquidity to support sizeable global investment	x	x	x	
3.3. Transaction costs-implicit&explicit costs to be reasonable and competitive	x	x	x	
3.4. Short sales permitted	x			
3.5. Off-exchange transactions permitted	x			
3.6. Efficient trading mechanism	x			
3.7. Transparency - market depth information / visibility and timely trade reporting process	x	x	x	x
4. Derivatives				
4.1. Developed derivatives market	x			

- Source: FTSE Global Equity Index Series. Quality of markets criteria (September 2010)

2. Developed economies, emerging and frontier of the EU in terms of FTSE criteria

As we can observe, the FTSE group uses the criteria grouped in Table 1 for the European Union's economies which was divided, for greater granularity into developed, emerging (advanced or secondary) and frontier economies. Regarding these types of economies in the *developed ones* we can talk about Belgium, France, Germany, Italy, Netherlands, Denmark, Ireland, UK, Greece (possible demotion from Developed to Advanced Emerging according to the FTSE list for March 2011), Portugal, Spain, Austria, Finland and Sweden; the *emerging group* includes Czech Republic (promoted in September 2010 from Secondary Emerging Economy to Advanced Emerging Economy), Poland and Hungary, as Advanced Emerging Economies); the *frontier group* is formed from Cyprus, Estonia, Lithuania, Malta, Slovakia, Slovenia, Bulgaria and **Romania**. Making appeal to each criterion specified in Table 2 we made, further on, a synthesis of the mode in which, each country from the EU which belongs to one or another of the previously mentioned categories of economies are situated according to the quality market criteria promoted by the FTSE group (Table 1-3). We made in this purpose a presentation of the criteria which must be taken into consideration followed by the precision of the accomplishment or of the existence of certain restriction related to the respective criterion.

Table 1. The position of the UE developed economies in relation with the FTSE criteria

Developed economies
Belgium, France, Germany, Italy, Netherlands, Denmark, Ireland, UK, Greece, Portugal, Spain, Austria, Finland and Sweden
1.1. Formal stock market regulatory authorities actively monitor market
1.2. Fair and non-prejudicial treatment of minority shareholders
1.3. Non or selective incidence of foreign ownership restrictions
1.4. Free and well-developed equity market
1.5. No objections or significant restrictions or penalties applied on the repatriation of capital
1.6. Free and well-developed foreign exchange market
1.7. Non or simple registration process for foreign investors
<i>All countries pass the 1.1.-1.7. criteria excepting France, Germany, Italy and Sweden which are restricted to the 1.2. criterion</i>
2.1. Settlement - Rare incidence of failed trades
2.2. Custody-Sufficient competition to ensure high quality custodian services
<i>All countries pass the 2.1. and 2.2. criteria</i>
2.3. Clearing & settlement - T +3 or shorter, T+7 or shorter for Frontier
<i>All countries has T+3 at that criterion only Germany has T+2</i>
2.4. Stock Lending is permitted
<i>Only Greece is restricted at this criterion</i>
2.5. Settlement - Free delivery available
<i>Only Spain is restricted at this criterion</i>
2.6. Custody - Omnibus account facilities available to international investors
<i>Only Greece is restricted at this criterion</i>
3.1. Brokerage - Sufficient competition to ensure high quality broker services
<i>All countries pass the criterion</i>
3.2. Liquidity - Sufficient broad market liquidity to support sizeable global investment
<i>Only Belgium, Denmark, Portugal and Austria are restricted to this criterion</i>
3.3. Transaction costs - implicit and explicit costs to be reasonable and competitive

Developed economies
<i>Only Ireland and UK are restricted at this criterion</i>
3.4. Short sales permitted
<i>Only Greece, Portugal and Spain are restricted at this criterion</i>
3.5. Off-exchange transactions permitted
<i>Only Greece is restricted at this criterion</i>
3.6. Efficient trading mechanism
<i>All countries pass the criterion</i>
3.7. Transparency-market depth information/visibility and timely trade reporting process
<i>All countries pass the criterion</i>
4.1. Developed derivatives market
<i>All countries pass the criterion</i>
5.1. Market capitalisation \$mn (as at 31 st dec. 2009)
<i>Belgium 364,742; France 1.960,403; Germany 1.292,355; Italy 655,848; Netherlands 558,281; Denmark 140,391; Ireland 61,291; UK 2.796,444; Greece 112,632; Portugal 98,067; Spain 1.297,227; Austria 114,076; Finland 178,838; Sweden 363,085</i>
5.2. Total number of Listed Companies
<i>Belgium 187; France 941; Germany 704; Italy 291; Netherlands 121; Denmark 196; Ireland 55; UK 2.179; Greece 285; Portugal 48; Spain 3.435; Austria 97; Finland 128; Sweden 260</i>

- realized by the author on the FTSE's data

Table 2. The position of the UE emerging economies in relation with the FTSE criteria

Emerging economies
Czech Republic, Poland and Hungary
1.1. Formal stock market regulatory authorities actively monitor market
1.2. Fair and non-prejudicial treatment of minority shareholders
1.3. Non or selective incidence of foreign ownership restrictions
1.4. Free and well-developed equity market
1.5. No objections or significant restrictions or penalties applied on the repatriation of capital
1.6. Free and well-developed foreign exchange market
1.7. Non or simple registration process for foreign investors
<i>All the emerging countries pass the 1.1.-1.7. criteria</i>
2.1. Settlement - Rare incidence of failed trades
2.2. Custody-Sufficient competition to ensure high quality custodian services
<i>All countries pass the 2.1. and 2.2. criteria</i>
2.3. Clearing & settlement - T +3 or shorter, T+7 or shorter for Frontier
<i>All countries are T+3 to this criterion</i>
2.6. Custody - Omnibus account facilities available to international investors
<i>All countries pass the criterion</i>
3.1. Brokerage - Sufficient competition to ensure high quality broker services
3.2. Liquidity - Sufficient broad market liquidity to support sizeable global

Emerging economies
investment
3.3. Transaction costs - implicit and explicit costs to be reasonable and competitive
3.7. Transparency - market depth information / visibility and timely trade reporting process
<i>All the countries pass the criteria 3.1.-3.7.</i>
5.1. Market capitalisation \$mn (as at 31 st dec. 2009)
<i>Czech Republic 44,775; Hungary 30,037; Poland 150,962</i>
5.2. Total number of Listed Companies
<i>Czech Republic 16; Hungary 44; Poland 470</i>

- realized by the author on the FTSE's data

Table 3. The position of the UE frontier economies in relation with the FTSE criteria

Frontier economies
Cyprus, Estonia, Lithuania, Malta, Slovakia, Slovenia, Bulgaria and Romania
1.1. Formal stock market regulatory authorities actively monitor market
1.5. No objections or significant restrictions or penalties applied on the repatriation of capital
<i>All countries, including Romania, pass the criteria 1.1. and 1.5.</i>
2.1. Settlement - Rare incidence of failed trades
2.3. Clearing & settlement - T +3 or shorter, T+7 or shorter for Frontier
<i>All countries, including Romania, are T+3 excepting Bulgaria and Slovenia which is T+2 at this criterion</i>
3.7. Transparency - market depth information / visibility and timely trade reporting process
<i>All countries, including Romania pass the criterion</i>
5.1. Market capitalisation \$mn (as at 31 st dec. 2009)
<i>Cyprus 10.269; Estonia 2.654; Lithuania 4.619; Malta 4.080; Slovakia 5.176; Slovenia 12.119; Bulgaria 8.647; Romania 27.456</i>
5.2. Total number of Listed Companies
<i>Cyprus 115; Estonia 16; Lithuania 41; Malta 20; Slovakia 172; Slovenia 76; Bulgaria 399; Romania 175</i>

- realized by the author on the FTSE's data

Conclusions

Regarding the EU economies as expected, these accomplish, generally speaking, all the criteria promoted by FTSE. Exception to this rule makes *France, Germany, Italy* and *Sweden* which are restricted to the „fair and non-prejudicial treatment of minority shareholders criterion”; *Greece* which is restricted to the „stock lending is permitted”, „short sales permitted”, „off-exchange transactions permitted” and „omnibus account facilities available to international investors” criteria; *Spain* restricted to the „free delivery available” and „short sales permitted” criteria; *Belgium, Denmark* and *Austria* restricted to the „liquidity - sufficient broad market liquidity to support sizeable global investment” criterion; *Ireland* and *UK* restricted to the „Transaction costs - implicit and explicit costs to be reasonable and competitive”; *Portugal* restricted at „liquidity -

sufficient broad market liquidity to support sizeable global investment”” and „short sales permitted” criteria. For the emerging countries, all of them pass the criteria specified by the FTSE. As component of the economies classified like frontier markets, *Romania* pass with succes both the criteria taken into discussion for these categories of economies (formal stock market regulatory authorities actively monitor market, no objections or significant restrictions or penalties applied on the repatriation of capital, settlement - rare incidence of failed trades, clearing & settlement - T +3 and transparency - market depth information/visibility and timely trade reporting process) but also and other criteria which belongs to the advanced emerging economies or even to the developed economies such as (non or selective incidence of foreign ownership restrictions, free and well-developed equity market, Custody-Sufficient competition to ensure high quality custodian services, Brokerage - Sufficient competition to ensure high quality broker services, Efficient trading mechanism).

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THE IMPACT OF IFRS ON REPORTING FOR BUSINESS COMBINATIONS: AN IN-DEPTH ANALYSIS USING THE TELECOMMUNICATIONS INDUSTRY

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The mandatory use of IFRS by all publicly listed companies in the European Union created challenges for accounting and reporting of business combinations, goodwill impairment and disclosures for these items. Major issues are allocation of amounts to goodwill and specific intangible assets arising from acquisition. This study presents an in-depth exploration of compliance with IFRS 3 and IAS 36 using content analysis methodology of annual reports of eight European telecommunications that were chose because the industry is well known for significant acquisitions involving intangibles. The results show only partial compliance with little change over the four year period since mandatory IFRS adoption. While results cannot be generalized outside this group, the in-depth analysis yielded important insights for continued research using broader research methods.

Key words: IFRS, business combinations, goodwill, content analysis, annual reports, listed companies

JEL codes: M41, M21, G34

Since the beginning of the corporate form of business organization, companies have found it beneficial to combine operations for several economic and business advantages. A major feature of globalization in recent years has been cross-border expansion and acquisition of subsidiaries in different countries. As such combinations become more complex, financial reporting issues become more complex and become more important for the global macro-economy (e.g. see Márquez-Ramos 2008). As a result, policy makers and standard setters have been active in developing reporting mandates, standards and guidance. One of the most significant events of recent years is the requirement of the European Union (EU) in 2002 to mandate that all companies listed on a public exchange in Europe must follow International Financial Reporting Standards (IFRS) for public financial reporting beginning in 2005. While this mandate is much broader than business combinations, virtually all publicly held companies are consolidated groups that result from business combinations and the mandate applies only for the consolidated group level reports. The European Commission was clearly motivated by a desire for consistency in financial reporting, comparability, and transparency. Article 1 of its Regulation 1606/2002 states: This Regulation has as its objective...to harmonising the financial information presented...in order to ensure a high degree of transparency and comparability of financial statements.

Approximately coinciding with the EU mandate, the IASB adopted IFRS 3 and amended IAS 36 in 2004. IFRS 3 addresses, among other things, the allocation of purchase price on acquisitions especially allocation to previously unrecorded intangible assets and residual amounts to unallocated goodwill. IAS 36 as amended focused on asset impairments, including impairment of unallocated goodwill. IFRS 3 and IAS 36 address many of the inconsistent and contentious issues of financial reporting for business combinations, attempting to provide standardization, accountability and transparency throughout all countries adopting IFRS, including the EU. Business combinations are one of the primary areas addressed by the International Accounting Standards Board (IASB) in IFRS 3 and IAS 36 in which the board seeks to provide significant and reliable information, especially for unallocated goodwill, for which there has been considerable creativity in the past (Forbes, 2007). Surveys of investors indicate the investors believe IFRS 3, especially, has a real impact on how they perceive companies and make their investment decisions because complying with IFRS 3 provides more transparency about companies (PricewaterhouseCoopers, 2006).

Despite discussions both extolling and questioning the virtues of mandatory adoption of IFRS, specifically with respect to business combinations, only recently there have begun to be research studies about whether the mandatory use of IFRS has achieved its purported objectives. The only study with which we are familiar that directly addresses issues of business combinations in Europe is Paananen (2008) who examined information provided about initial recognition of goodwill under IFRS3, although there have been other studies, discussed and cited below, about IFRS adoption in general. This study explores the extent to which European companies are complying with the mandate to report using IFRS with respect to business combinations and how the level of compliance may have changed in the years following the mandate. Thus, this study adds to this small but growing body of research literature with an in-depth examination of financial reporting of business combinations by European companies in the telecommunications industry for four years after mandatory adoption.

Telecommunication companies are used for the study because there have been several significant acquisitions in the industry and telecommunications companies have significant intangible assets that must be considered in allocation of purchase prices. The research method is content analysis in which there is an in depth review and analysis of financial reports for the companies chosen before 2005 and for the period 2005 through 2008. Remaining sections next discuss issues related to financial reporting of business combinations and subsequent impairment testing and present two research questions. Then we present prior research on the issues. Then we present the research methodology. Finally, results are presented followed with a concluding discussion.

1.0. Financial accounting and reporting for business combinations

Accounting and financial reporting issues for business combinations can be categorized in two broad general topic areas, although there are overlaps and any categorization has the risk of being over simplified: First are issues related to measurement and disclosures of items related to the combination itself. These include measurement of identifiable intangibles assets arising from the combination, i.e. intangible assets not previously recorded and unallocated goodwill arising from the acquisition. Second are issues related to measurement and disclosures of asset impairments. While impairment is not limited to business combinations, a major portion of the accounting and reporting issues are related to goodwill.

As a result, we have formulated two research questions to guide this study:

Q1. To what extent has the mandatory adoption of IFRS been followed by telecommunications companies' compliance with measurement and disclosure standards for items directly related with business combinations.

Q2. To what extent has the mandatory adoption of IFRS been followed by telecommunications companies' compliance with measurement and disclosure standards for goodwill impairments. Prior research on these topics has been limited. There have been several studies of IFRS adoption in general, many prior to the mandatory adoption requirement of the EU (e.g. Street, Bryant and Gray 1999; Street and Bryant 2000; Street and Gray 2001 and 2002, Glaum and Street 2003; and Hodgdon et al. 2009) which all indicated a low level of compliance despite statements of the companies and their auditors that statements were in accordance with IFRS. The only study of business combinations in a European setting was that of Paananen (2008) who measured the volume of information of goodwill under IAS 36 for companies in France, Germany, and the United Kingdom and found a low level of compliance. Sevin et al. (2007) and Shalev (2009) examined goodwill disclosures for U.S. companies under U.S. GAAP, finding sporadic and limited compliance with standards. All of these studies were broad-based examining large groups of companies and thus, though, did not examine in depth the issues of individual companies. Despite the interest in individual companies expressed above, there have been no substantial in-depth studies of companies. Therefore, this study takes a first step in the study of individual companies.

1.1. Measurement and reporting issues from business combinations

When businesses combine, many complex accounting and reporting issues arise. Prior to the mandatory adoption of IFRS in 2005, European companies were subject to local country accounting standards which varied widely. One of the primary motivations for the 2002 mandate was to eliminate the inconsistencies of the many different standards that were being used in Europe before 2005. IFRS standards are generally more stringent and in particular require substantially more disclosures than many if not most local European countries' accounting standards (Jermakowicz and Gornik-Tomaszewski 2006). The accounting standards of most individual European countries, especially on the continent of Europe, are based on the interests of many stakeholders while IFRS are motivated primarily by interests of investors. This difference in focus has major impacts on valuation methods as well as a major increase in disclosures (Jermakowicz and Gorkin-Tomaszewski 2006, Ernst & Young 2006). Some European companies voluntarily adopted accounting standards of other countries, notably U.S. GAAP, primarily because they were listed, or sought listing on stock exchanges in the U.S. Street and Bryant (2000) observed when examining IFRS compliance in general, before mandatory adoption that a listing in the U.S. did not seem to affect compliance with IFRS. In our in-depth analysis, we also examine the extent of multiple listings and the impact on compliance with IAS 36 and IFRS 3.

1.1.1. Allocating the cost of a business combination

As business combinations and the environment in which they occur have become more complex, the issue of how to allocate the acquisition cost to various items has taken on greater importance and thereby the interest of standards setters, companies and their auditors. Prior to mandatory adoption of IFRS and issuance of IFRS 3, most if not all accounting standards used by European companies involved some type of an allocation of the acquisition cost to specifically identifiable assets and liabilities of the acquired company; the remainder remained as unallocated goodwill. Assets and liabilities of acquired companies were typically measured at fair value. In some situations, though, the full fair value of acquired assets was not recognized, but instead only the percentage of ownership was applied to the excess of fair value over book value. In some countries, the write-down of assets is viewed as conservative and goodwill along with other assets were written down to lower amounts or written-off. Accounting standards of some countries required reporting of contingent liabilities while others did not. Goodwill has been a major issue in accounting and reporting of business combinations for many years in many

countries (e.g. see Ma and Hopkins, 1988; Johnson and Petrone, 1998; Fontanot, 2003; Gaughan, 2005). There is general recognition that value of a business as a whole is greater than the aggregation of individual assets less liabilities, and this difference is called goodwill in general terminology, although the term “goodwill” was not found in financial reports themselves. Two major issues are the subsequent treatment of unallocated goodwill in following years, discussed shortly, and to what extent other intangible assets must be separately identified in order to leave unallocated goodwill as truly a residual that cannot otherwise be attributed to an asset. Traditionally, little effort was made to separate unallocated goodwill from other intangibles arising from the acquisition that were not previously reported on an acquired company’s financial statements, e.g. brands, customer lists, self-developed patents and the like. Because traditionally all intangible assets including unallocated goodwill were amortized or written off, there was little perceived need to make such a separation. With the adoption of IFRS 3, and a similar standard in the U.S., goodwill would no longer be amortized but instead subject to impairment testing as discussed below.

IFRS 3, paragraph 45, states that intangible assets must be recognized separately from goodwill in business combinations when they meet the definition of intangibles in IAS 38 and their fair values can be measured reliably. This requirement, contrary to much of traditional practice, provides a clear instruction for companies to reduce amounts of unallocated goodwill and increase amounts allocated to previously unrecognized intangible assets. Caldwell (2006) indicates that such increased allocation to specific intangible assets is occurring, although at a glacial pace. Not only is such allocation difficult and tedious, companies have little incentive to make such allocations because, among other reasons, increased amounts allocated to other intangibles lead to lower reported income because such intangibles must be amortized while goodwill is no longer amortized with the adoption of IFRS. (For more discussion see, for example, Jetuah , 2007; Deloitte Touche Thomatsu, 2004; PricewaterhouseCoopers, 2004, and similar professional sources). Traditionally, European companies following local accounting standards had a wide variety of approaches for accounting for unallocated goodwill after a business combination, and in some cases could choose among alternatives. Such provisions are too numerous to present here. (For a comprehensive discussion see Carrara, 2007, pg. 94.) Briefly, the most common treatment was amortization over periods not to exceed five years or 20 years. Write-off of unallocated goodwill against reserves or current year’s income is permitted in some situations and various choices of impairment testing were permitted. IFRS 3 eliminated amortization of goodwill, instead requiring impairment testing (discussed shortly). Thus, IFRS 3 establishes a motivation that might be viewed as contradicting the board’s desired end result to allocate amounts to specifically identifiable intangible assets arising from the acquisition. A requirement to identify as many intangible assets as can be reliably measured would lead to lower future net income as the intangible assets are amortized thus motivates companies to “err” on the side of continuing recognition of as much of the acquisition cost as unallocated goodwill which will no longer be amortized. Therefore, a major element of this study is to examine the portions of acquisition costs allocated to goodwill before and after mandatory adoption of IFRS, and over the subsequent four year period.

1.1.2. Disclosures related to business combinations

Traditionally, European companies were subject to few disclosure requirements and disclosure requirements are not consistent among countries (Jermakowicz and Gornik-Tomaszewski 2006, Ernst & Young 2006). IFRS 3 sought to achieve greater transparency and accountability by imposing extensive disclosure requirements. These are too numerous to list here, but are presented in Appendix 1 along with results of the study. Briefly, they include details about the nature of the transaction, amounts of acquired assets before and after acquisition, description of

determination of goodwill and intangible assets included or recorded separately, profit impacts, and reconciliation of unallocated goodwill to evaluate changes during the year. One of the objectives of this study is an in-depth assessment of the extent of compliance of each company with respect to these disclosure requirements since 2005 and changes over time.

1.1.3. Other issues

Other issues are apparent from the mandatory adoption of IFRS and issue of IFRS 3 that cannot be addressed by this study. For example, the choice of accounting method, purchase or pooling of interests (also called uniting of interests) is now largely irrelevant because IFRS prescribe that all business combinations shall be reported using the purchase method. Identifying whether an activity is indeed a business combination for financial reporting purposes and identifying the acquiring entity also present challenges. We must assume that these issues are adequately resolved, apart from disclosures, because we do not have access to the internal documentation of the company and its auditors. Similarly, measuring the cost of a business combination also presents challenges that we cannot address apart from disclosures because of lack of access. (For more discussion of these issues see, for example, Epstein and Mirza, 2005; Deloitte Touche Tohmatsu, 2004, and similar educational and professional items published by various sources.)

1.2. Impairment testing of goodwill

The requirement for impairment testing has been a part of accounting tradition in most countries for many years, although not always formalized and traditionally often a term other than “impairment” was used. For example, a notion has existed in many countries for some time that assets should not appear on a balance sheet at greater than a recoverable amount, “recoverable amount” defined in various ways. With respect to unallocated goodwill, impairment testing could be triggered by a specific event, or be required annually. Traditionally unallocated goodwill has often been subject to impairment testing even if it was being amortized so that impairment testing and amortization are not alternatives. After considerable discussion and debate, the IASB in IFRS 3 specified impairment testing exclusively, referring to IAS 36 which was amended. IAS 36 applies to assets in addition to goodwill, but the focus of most discussion is on the impact of IAS 36 on impairment testing of unallocated goodwill. (For more discussion of impairment testing see, for example, Carrara, 2008; Carlin, Finch, and Guy, 2007; Wines, Dagwell, and Windsor, 2007; Ernst and Young, 2007; International Accounting Standards Board, 2004; and similar sources.)

1.2.1. Impairment testing based on Cash Generating Units

Traditionally, impairment testing of goodwill was based on the aggregate amount of unallocated goodwill on the balance sheet. One of the most significant elements of IAS 36 is the requirement that companies now must define cash Generating Units (CGUs) within themselves, the smallest identifiable group of assets that generate cash inflows that are largely independent of other groups of assets that generate cash inflows. Unallocated goodwill must be assigned to each CGU and impairments tests conducted for each CGU. While there are guidelines for defining CGUs, management discretion remains. In order to assess goodwill impairment, the companies must determine recoverable amounts from each CGU and compare the recoverable amount with the carrying value of the net assets of the CGU. If the recoverable amount of the CGU is less than the carrying value, any deficiency first reduce unallocated goodwill. Any remaining deficiency reduces other assets. IAS 36 specifies two approaches to determine the recoverable amount of CGUs: First, the fair value less cost to sell is based on a sale of the CGU in an existing market. Second, the value in use reflects the present value of future cash flows. IAS 36 provides specific guidance for both approaches, especially determining cash flows and appropriate discount

factors. (Carrara, 2008; Carlin, Finch, and Guy, 2007; Wines, Dagwell, and Windsor, 2007; Ernst and Young, 2007; International Accounting Standards Board, 2004; and similar sources). The assignment of unallocated goodwill to CGUs and use of CGUs to assess impairment represents a significant departure from almost all accounting traditions and can be expected to represent a significant challenge for first time adopters of IAS 36 beginning in 2005. Therefore we do an in-depth analysis of annual reports to explore companies' identification of CGUs and impairment testing.

1.2.2 Disclosures related to impairment tests

Traditionally, disclosure requirements for asset impairments varied substantially among countries and in general were not extensive (Jermakowicz and Gornik-Tomaszewski 2006, Ernst & Young 2006). The IASB sought to increase transparency and accountability and allow users of financial reports to make independent reflections on the impairment process by requiring a wide range of information be disclosed for each CGU that has a substantial amount of unallocated goodwill. Disclosure requirements of IAS 36 vary depending on which approach is used to measure the recoverable amount; disclosures are more extensive for the value in use approach than for the fair value approach.

As above for disclosures of business combinations, the disclosure requirements are too extensive to list here and are presented in Appendix 1 along with results of the study. In general, the requirements require disclosure of assumptions and approaches used to determine fair values and costs to sell if the fair value approach is used; and assumptions about the amount and duration of cash flows, growth rates, and discount rates if the value in use approach rate is used. As with disclosures about measurements for business combinations, another objective of this study is to assess compliance with disclosure requirements of goodwill impairment tests for each company.

1.3 Compliance and enforcement

It is meaningless to speak about high quality financial reporting and transparency as envisioned by the IASB and the European Commission unless effective and consistent application of IASs and IFRSs is ensured (Whittington 2005, Daske et al. 2008). Positive economic consequences of IFRS adoption can occur only in countries with strict enforcement regimes (Daske et al. 2008). The level of compliance is as important as the standards themselves (Hogdon et al. 2009). Such compliance is viewed as narrowing the information gap between informed and uninformed investors and consequently increasing capital market efficiency (Healy and Pelapau 2001, Ball 2006). IFRS implementation is viewed as the "Achilles heel" of IFRS (Ball 2006) because partial compliance with IFRS may lead to uncertainty about the real economic situation of an entity. In this study we explore enforcement, or lack thereof.

2.0 Method and company selection

This study uses a pattern model of explanation that does not contain general theories in explanations but seeks to observe specific occurrences in the context of the systems in which they occur in order to provide explanations for the occurrences (Ryan, Scapens, and Theobald, 2002). Content analysis methodology is well suited for this type of pattern study because it allows in-depth examination and analysis of specific occurrences in the context of the systems in which they occur, i.e. the extent of proper application of IFRS 3 and IAS 36 in preparation of published annual reports of the eight companies studied.

2.1 Content Analysis

Content analysis involves objective and systematic analysis of communication media, in this study published annual reports, in order to extract data, count observations for further analysis

including statistical analyses, and form qualitative assessments. (For more discussion of the content analysis research method see, for example, Carney 1972, Krippendorf 1980, and Steenkamp, 2007.) Content analysis is especially useful for this study because if applied properly it is:

- Systematic and covers all aspects of the issue uniformly throughout the text analyzed.
- Objective because all content is considered alike and impartially collected.
- Manifest because all content is taken at face value without interpretation.
- Informative because it reveals trends and characteristics not otherwise observable

Because of the mass, complexity, and sometimes chaotic nature of the content. Content analysis allows deeper analysis of situations than other methods. In this study we read thoroughly the content of all annual reports of the eight companies for the years 2005 through 2008, 32 annual reports total, in order first to assess for each company, to the extent possible, the compliance with measurement aspects of IFRS 3 and IAS 36. In addition we examined all disclosures in order to determine whether the companies had adequately disclosed all mandatory items required by IFRS 3 and IAS 36. Content analysis allows quantitative analysis of data extracted from the analysis. In this study we examine the level of compliance with IFRS disclosure requirements for both IFRS 3 and IAS 36 using a comprehensive disclosure index. This index includes all disclosure requirements of each standard. This index enables the quantification of the level of compliance with a compliance ratio that takes values from 0 (no compliance) to 1 (full compliance). Specifically, in order to score companies, the so called dichotomous approach is used (Cooke, 1989; Street and Bryant, 2000; Glaum and Street, 2003; Jahangir, Kamran, and Darren 2004; Akhtaruddin, 2005; Hassan et al, 2009) in which if a required item is disclosed, it is scored as 1 and if not disclosed it is scored 0; if an item is not applicable for a company, it is marked as “NA”. Then, the level of compliance for each company is calculated as the ratio of the total items disclosed to the total number of applicable disclosure items as follows:

$$LC_{i,t} = \frac{D_{i,t} = \sum_{j=1}^n d_j}{A_{i,t} = \sum_{j=1}^m a_j}$$

Where,

LC_{i,t} = The total Level of Compliance score for firm i in year t $0 \leq L.C. \leq 1$

Di,t = The total number n (0, m) of disclosed items d for firm i in year t

Ai,t = The total number m (3, 58) of applicable disclosure items a for firm i in year t

Following Glaum and Street (2003), the disclosure index is based on a checklist developed by the audit firm Deloitte (2008). In order to ensure the completeness of the index, items are compared with similar checklists of the other three major audit firms and with Ntzanatos (2008). During the period under examination (2005-2008) no amendments to the two standards occurred and no company adopted optionally the amendments of IFRS 3 and IAS 36 before their mandatory adoption on 1 January 2009.

2.2 Company selection

For this study, we selected eight European telecommunications companies. The telecommunications industry was chosen because companies have been active in business combinations in recent years. In addition, telecommunications companies tend to have relatively large unrecorded intangible assets related to brand, customer lists, licenses, etc. As a result they have been reputed in the media to have paid large amounts to acquire companies in the same

industry so that examining goodwill and intangible assets from the combinations allows a focus on the research objective. This group of eight companies is admittedly a convenience sample and generalizations cannot be made outside of this group. Nonetheless, the small sample permits an in-depth analysis that would not be possible otherwise. Moreover, the companies are large enough to be significant on European stock exchanges and thus provide insight into the behaviour of large European companies with respect to IFRS adoption. The companies and some descriptive data are presented in Table 1. The data as of the end of 2005, the first full year of this study is designed to give a view of the size and significance of the company with respect to total assets, equity, revenues, net income, cash flow from operations, and number of employees. The exchanges on which the shares are listed also give some indication of the significance. [Table 1 about here]

3.0 Results of content analysis

In order to assess the two research questions, we first explored annual reports to first examine accounting and reporting treatment for combinations before 2005 and then in each of the subsequent years. After examining the materiality of goodwill, we explored the measurement issues of allocation of purchase prices to goodwill and other intangibles and then explored measurement issues related to goodwill impairments. Afterwards, we examined the disclosures about measurement issues related to both topics to determine if they comply with the requirements of IFRS 3 and IAS 6. As will become apparent, it is not possible to make a clear distinction between measurement and disclosure issues, but we have done so to the extent possible as a means to organize our findings. Finally, we explore issues about stock exchange listings and auditor choice.

3.1 Goodwill as a percentage of total assets: materiality and trends

One of the first issues to be considered in an in-depth analysis is whether the carrying amount of unallocated goodwill on companies' balance sheets is material enough to warrant concern and further in-depth analysis. Among other things, the materiality of goodwill is closely related to the volume of disclosures mandated by IFRS 3 and IAS 36. The issue of materiality is particularly broad and uncertain because there is no objective method of measuring it (Hoogendoorn, 2006). As a consequence, in many cases both Assistant Lecturers and users of financial statements use "rules of thumb" in order to determine whether an item or an event is material or not (Shalev, 2009).

In this study, we first base the materiality of goodwill on IAS 1, Paragraph 29, which specifies that an entity shall present separately items of a dissimilar nature or function unless they are immaterial. Consequently we initially assume that if companies recognize goodwill as a separate line item on their balance sheets or elsewhere in the explanations of financial report items, the amount is material and subject to the disclosure requirements of IFRS 3 and IAS 36. As a further examination of materiality we have considered reported unallocated goodwill as a percentage of total assets for each company for each of the years examined as shown in Table 2. This table shows that goodwill is material by virtually any "rule of thumb", ranging from lows of 12 percent and 14 percent to highs of 51 percent and 58 percent of total assets. For some companies, goodwill is the largest single asset. Moreover, of primary interest for this study, unallocated goodwill as a percentage of total assets is not decreasing, contrary to the objectives of the IFRS 3 that unallocated goodwill should decrease as increasing amounts are allocated to specifically identifiable intangible assets arising from acquisitions. All companies showed an increase in goodwill as a percentage of total assets from 2005 to 2008 except Vodafone which showed a decrease from 59 percent to 40 percent. Some companies showed very small year-to-year decreases, but an overall increase for the four-year period.

[Table 2 about here]

3.2 Accounting and reporting issues directly related to acquisitions

Research question 1 states:

Q1. To what extent has the mandatory adoption of IFRS been followed by telecommunications companies' compliance with measurement and disclosure standards for items directly related with business combinations.

It relates specifically to amounts allocated to specific intangible assets arising from acquisitions and the remaining unallocated goodwill. IFRS 3 clearly took a position that amounts reported as unallocated goodwill should be limited to items that cannot be identified or measured reliably while items such as brands, trademarks, customer base, etc. should be identified and reported separately. The clear expectation of IFRS 3 is that amounts reported as unallocated goodwill would decrease while amounts allocated to specifically identifiable intangible assets would increase. Therefore, our primary criterion for assessing the compliance with measurement and reporting requirements of IFRS 3 is the relative amounts allocated to specific intangible assets, amounts that remain as unallocated goodwill, and the trend over time.

3.2.1 Business combinations before 2005

Examining the annual reports of the eight companies for various different years before 2005 shows, as expected, a wide variety of practices all of which are generally sketchy and inadequate from which to make assessments and lacked transparency. In general, information presented is limited to the purchase price, the percentage of equity shares acquired, and amount of goodwill. On average 75 percent of the purchase price was remained unallocated goodwill. Only Telenor and France Telecom provided information about purchase price allocation and allocated small amounts to intangible assets that were not previously reported by the acquired company. Vodafone indicated that many of its acquisitions were driven by the aim to acquire trademarks and customer bases of other companies, but the financial statements do not show amounts allocated to such intangible assets. (For more details and illustrations see Carrara 2008.)

3.2.2 Accounting and reporting for business combinations in years beginning in 2005

The examination of annual reports for 2005 onward showed the eight companies began to present more comprehensive information about business combinations than in previous years, yet several significant failures to comply with the intentions and requirements of IFRS 3 are evident. Notably the IASB in IFRS 3 clearly expects companies to allocate more of the amounts of purchase prices to identifiable intangible assets not present on financial statements before combination and thereby reduce amounts allocated to goodwill.

3.2.3 Accounting and reporting for business combinations in 2005

As shown in Figure 1 for acquisitions in 2005, based on aggregated information for all companies there would seem to be some progress in the direction desired by the IASB: on average the amounts of unallocated goodwill at acquisition declined from the average before 2005 of 75 percent, but still remain relatively high at 60 percent. Amounts allocated to specifically intangible assets not previously reported on financial statements are 45 percent of the amounts allocated. Other amounts were allocated to assets existing before acquisition and to liabilities.

[Figure 1 about here]

As shown in Table 3, though, examining each major acquisition in 2005 individually indicates wide variation among companies in amounts allocated to goodwill. A few acquisitions with very low and negative goodwill distort the aggregate average. Amounts of unallocated goodwill by other companies remain high, often almost the entire purchase price. Percentages allocated to specifically identifiable assets remain low with two anomalies of 98 percent and 354 percent of the purchase price, the latter because large amounts were allocated to both liabilities and reduction of other assets, distorting the aggregate average. Some of the companies indicate substantial increases in customers, new market entry, etc., but do not allocate amounts to customer lists, brands, trademarks and the like. Relatively large amounts are identified merely as other intangible assets with no description. Companies give only vague comments such as future profits, synergies and growth to describe what constitutes unallocated goodwill. It is apparent that the reporting of business combinations in 2005, while providing more information than in years before mandatory adoption of IFRS, is not achieving the expectation of the IASB to increase accountability and especially increase transparency.

[Table 3 about here]

3.2.3 Accounting and reporting for business combinations in 2006

Examination of annual reports for 2006 shows, as presented in Figure 2, on average the aggregate amount of purchase prices reported as unallocated goodwill has increased to 63 percent compared to 60 percent in 2005, while the percentage allocated to specifically identifiable intangibles has decreased to 29 percent from 45 percent, the opposite direction expected by the IASB.

[Figure 2 about here]

Looking at individual companies' reporting of acquisitions in 2006, as shown in Table 4, provides additional perspective. One significant anomaly, Telefonica's acquisition of Colombia de Telecomunicaciones with percentages in hundreds of percentage points, is distorting aggregate amounts and Telefonica did not provide explanation for the anomaly. Even among other acquisitions by other companies, there are wide variations in amounts allocated to goodwill from as low as three percent to over 100 percent. Most companies seemed to report percentages of unallocated goodwill consistent with patterns in years before 2005. Amounts allocated to previously unreported intangible assets varied from a low of two percent to a high of 93 percent. Most of the allocations to previously unreported intangible assets, though, were relatively low and did not appear to reflect the objective of IFRS 3 for companies to allocate more of acquisition costs to specific previously unreported intangible assets and less to unallocated goodwill. Elisa, Telenor, and TeliaSonera notably allocated amounts to specific previously unreported intangible assets as required by IFRS 3. France Telecom allocated amounts to trademarks, licenses, and customer base for one acquisition. France Telecom, however, did not show all the allocations of purchase price and did not provide reconciliation of amounts allocated as it had in the previous year; it was not possible to analyze all of the allocations of France Telecom. Deutsche Telekom did not provide full details about its acquisition of Polska Telefonia and we were required to make educated assumptions to complete our analysis. Companies continued to give vague comments to explain unallocated goodwill, i.e. future synergies and profits. In general, there was no apparent increased compliance with measurement aspects of IFRS 3 for these eight companies from 2005 to 2006. A notable step towards accountability and transparency, though, is Telenor's aggregation of acquisitions that the company states are individually immaterial showing detailed information about the acquisitions in the aggregate.

3.2.4 Accounting and reporting for business combinations in 2007

Examining aggregate amounts for 2007 as shown in Figure 3 shows a continuing pattern of relatively large amounts on average, 68 percent, continuing to be reported as unallocated goodwill. A substantially increasing percentage being allocated to previously unreported identifiable intangible assets, increased to 44 percent in 2007 compared to 29 percent in 2006, suggesting that companies are increasing amounts allocated to other intangibles as expected by IFRS 3.

[Figure 3 about here]

When looking at details about specific acquisitions in 2007 as shown in Table 5, there was a notable absence of very large amounts allocated to specific items compared to the previous two years. It is not possible to know whether this absence of large anomalies results from a difference in the nature of the transactions or from improved financial reporting of the companies. Companies notably show more information about amounts allocated to specific intangibles with a notable decrease in amounts identified as “other intangible assets”. In general, percentages allocated to intangible assets show an increase from the previous two years. With the exception of France Telecom, percentages reported as unallocated goodwill show decreases from the previous years. These two findings suggest the companies are reporting amounts in the direction expected by IFRS 3. France Telecom notably did not provide details about allocations and amounts that were provided did not reconcile mathematically. Likewise information about one of the acquisitions of Telecom Italia did not reconcile mathematically and was sketchy. Telenor continued to report an aggregate of acquisitions that are individually immaterial. Descriptions of amounts reported as unallocated goodwill remain vague with comments about future profits and synergies. In general, we noticed a suggestion of a small trend towards compliance with measurement expectations of IFRS 3 with a continued long ways to go.

[Table 5 about here]

3.2.5 Accounting and reporting for business combinations in 2008

Looking at Figure 4 for acquisitions in 2008 shows that the aggregate of amounts reported as unallocated goodwill remains in the same percentage range as the previous years, in the 60 percent range. The percentage of amounts allocated to identifiable previously unreported intangible assets, though, has reverted to the mid 20 percent range of 2006.

[Figure 4 about here]

Looking at the details of each acquisition in 2008 suggests that some patterns may be emerging. More of the eight companies are identifying specific previously unreported items of intangibles, rather than “other intangible assets”, as receiving allocations of acquisition costs. The percentage amounts allocated to intangible assets emerging from acquisitions remain low, though. France Telecom has made remarkable progress in reporting amounts allocated to specific previously unreported intangible assets as well as other details about its acquisitions. Elisa has joined Telenor in reporting aggregate information in detail for acquisitions that are individually immaterial. Amounts reported as unallocated goodwill remain relatively high with vague descriptions about future profits and synergies. In general it appears there is slow continued progress towards meeting the measurement requirements of IFRS 3 with respect to greater amounts allocated to identifiable intangible assets and lower amounts allocated to goodwill.

3.3 Accounting and reporting issues directly related to impairment testing

As discussed in detail above, the IASB made substantial changes in requirements for impairment testing of goodwill compared to its previous standards and those of almost all local countries' accounting standards. Two major elements are defining cash generating units (CGUs) and specifying methods by which the impairment of a CGU is assessed, and then any impairment of goodwill.

3.3.1 Specifying CGUs

The clear intent of the IASB in requiring impairment testing by CGU was to expose more amounts of unallocated goodwill to potential impairment by minimizing the impact of aggregation on impairment. Previously, when unreported goodwill as a whole was subject to impairment tests, the impairment of goodwill related to specific operating units could be avoided because the goodwill in the aggregate was not materially impaired. In providing guidelines on how companies should define CGUs, the clear implication was that CGUs should be small enough to represent realistic units in order to limit aggregation as a means to avoid impairment testing and write-down of unallocated goodwill with resulting negative impact on reported income. In this study, we examine annual reports to discover how companies have defined CGUs and draw inferences about the appropriateness of the definitions.

Table 7 shows CGUs by company as determined from information in 2005 and 2006 annual reports. Only Telenor and France Telecom described that the combinations of CGUs for which impairment tests were made is based on independence of cash flow generating activity. Vodafone had only four CGUs despite having nine segments, and TeliaSonera has four CGU despite having 10 segments. The standard specifies that the highest level for a CGU is business segment; therefore, Vodafone and TeliaSonera must have combined segments to determine CGUs. Telefonica did not provide information about CGUs. These results suggest at best a half-hearted attempt to comply with IAS 36 and based goodwill impairment testing to different levels from those expected by the IASB.

3.4 Compliance with disclosure requirement for business combinations and goodwill

As discussed in more detail above, one of the most important elements of IFRS 3 and IAS 36 was imposition of a substantial number of disclosure requirements. In order to examine the extent to which companies complied with disclosure requirements of each standard, we tabulated the number of companies complying with each standard as shown in Appendix 1. This analysis shows that all or nearly all companies either complied with a specific requirement or failed to comply with a requirement; there was little variation in the number of companies complying with each standard. This analysis indicates that all of the companies were having the same difficulty complying or choosing to ignore the same requirements. It is important to note that the disclosures that require merely reporting basic data that are readily available, e.g. name of acquired company and basic information about the acquisition, are those with which all companies comply. Disclosure requirements that require extensive analysis and description are those with which there is substantial non-compliance. It is important to note that we did not detect any substantial increase in the number of companies complying with specific disclosure requirements over the four year period.

As discussed in detail above, we also computed disclosure indexes and compliance ratios for each company for each year. Figures 5 through 12 show compliance ratios by company by year and by standard with line graphs for each company. Analyses of each company show that some companies have indeed improved over time, notably TeliaSonera and Telenor. Vodafone has consistently had high compliance ratios. Some companies, notably France Telecom and Telefonica show a decline in compliance and low levels of compliance. The overall picture, other

than the three companies mentioned, is one of partial compliance and no indication of improvement.

3.5 Effect of stock exchange

As indicated above when we provided basic descriptive material for the companies involved in Table 1, we included stock exchange listings. Six of the eight companies have multiple listings. Only Elisa and TeliaSonera are not listed in the U.S. TeliaSonera does file Form 20 with the Securities and Exchange Commission, though, presumably because it has other securities in the U.S, a fact that we did not investigate. There is no apparent indicate effect of the multiple listings, and in particular listing in the U.S. on the type of information presented. The only detectable effect is the listing of Telenor on the Oslo Stock exchange which is noted for rigorous enforcement of accounting requirements [a source will be cited here]. Telenor throughout this analysis has shown a fairly high degree of compliance with both the requirements and expectations of the IASB in IFRS 3 and IAS 36.

4.0 Concluding discussion

This study has provided an in-depth analysis of compliance with IASB standards related to business combinations and goodwill impairment by exploring eight European telecommunications companies using content analysis methodology. While results cannot be generalized outside the eight companies, the insights obtained would not have been possible with broader-based research methods that did not explore as deeply. The findings indicate that at best there is only partial compliance with IASB standards and only limited improvement at best over the four year period. Among the most important findings is the fact that companies continue to report relatively large amounts of unallocated goodwill upon acquisition despite the clear expectation of the IASB that amounts allocated to goodwill will decline as larger amounts are allocated to specifically identifiable previously unreported intangible assets. There is a detectable increase in identification of amounts allocated to specific previously unreported intangible assets upon acquisition, e.g. customer bases, licenses, trademarks and brands, etc. But no detectable increase in the overall amount of such assets is apparent. Similarly there is little compliance with standards relating to goodwill impairment, notably assigning goodwill to appropriate CGUs. Moreover, there is at best only partial compliance with disclosure requirements of IFRS 3 and IAS 36.

The partial compliance with standards of the IASB has several implications, one of which is the future viability of the Board itself. Potentially of greater importance, though, is audit failure in which the audit reports indicate fair reporting and compliance with standards when there is obvious lack of compliance. Potentially of even greater importance, yet, is the lack of enforcement mechanism to assure compliance. The only detectable enforcement that was detected is that of the Oslo Stock Exchange as evidenced by Telenor's high level of compliance. All of these issues remain as issues for further research and the findings of this study provide bases for that research.

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Table 1. Companies Studied with Descriptive Information in 2005

Company and country of Origin	Exchange listings	Number of Employees ²	Total Assets ¹	Equity ¹	Revenues ¹	Net Income ¹	Cash Flow from Operations ¹
Deutsche Telekom Germany	Frankfurt and other German exchanges, New York, Tokyo	244,000	127,880	49,582	59,604	6,016	14,998
Elisa Finland	Helsinki (now part of OMX)	4,681	2,204	1,350	1,377	212	310
France Telecom France	Paris, New York	196,452	109,360	28,438	49,038	6,360	13,374
Telecom Italia Italy	Milan, New York	80,000	96,010	26,985	29,919	3,690	9,936
Telefonica Spain	London, Frankfurt, Madrid, New York, Tokyo and other exchanges in Spain and South America	207,641	73,174	16,158	37,882	4,827	11,139
Telenor Norway	Oslo, NASDQ	23,200	15,568	6,700	8,626	1,143	2,796
TeliaSonera Finland Sweden	Stockholm, Helsinki (now p OMX)	28,175	21,660	14,423	9,318	1,456	2,869
Vodafone ³ UK	London, New York	57,378	367,520	280,323	125,651	(28,716)	34,892

¹ End of 2005. In millions of Euros using exchange rates at December 31, 2005 for non-Eurozone companies. Data from 2005 Annual report

² Average number of employees during the year 2005 or number of employees at the end of the year 2005, depending on data reported in the annual report.

³ Vodafone reports on a fiscal year ending 31 March. Data are taken from the 31 March 2006 annual report.

Table 3. Telecom Companies reporting of acquisitions in 2005

Company and acquisition	Percent acquired	Acquisition price ¹	Percentage allocated to				Goodwill	Comments
			Pre-acquisition assets (adjusted to fair values)	Liabilities, minority interest and similar items	Pre-acquisition other net assets	Intangible assets from acquisition		
Deutsche Telekom subsidiary acquired Telekom Montenegro	76.5%	147	122%	-53%	69%	14%	17%	Did not present adequate details to make allocation; required educated guesses. No explanation of amount allocated to "other intangibles" Report says that gives foothold into region, but no other details about individual intangibles to which acquisition costs allocated and what constitutes goodwill
Deutsche Telekom subsidiary acquired Alubra Telecomunicaciones	100%	36	278%	167%	111%	0%	-11%	Very sketchy details; educated guesses required. Negative goodwill of €4 million not explained. Negative goodwill increased net income.
Elisa acquired Tikka Communications	100%	37.3	82%	-20%	63%	18%	19%	The entire increase in intangibles from acquisition is allocated to the customer base. ??? Goodwill is attributed to synergies in the fixed network business.
Elisa acquired Saunalahti	100%	374	28%	-30%	28%	24%	78%	Amounts allocated to customer base and brand exceed total increase in intangibles; apparently acquired intangibles were deceased Company emphasizes significance of brand and customers and intent to develop further but allocates only 25% to these items. Relatively large 78% allocated to goodwill described as being attributed to synergies in network capacity and mobile communications business.
France Telecom acquired parent of Amena	79.4% of parent owning 98% of Amena	6,687	75%	-89%	-14%	46%	67%	Allocated amounts to trademarks, licenses, and subscriber base; nothing to other intangible assets. Description says that customer base is major impetus but only 33% allocated. No details about two-thirds allocated to goodwill.
Telecom Italia acquired Liberty Surf Group	100%	268	49%	-47%	2%	5%	93%	Liberty Surf is a major French provider; description emphasizes that number of customers increased substantially, but only 5% allocated to the customer base. No explanation for large percentage of 93% allocated to goodwill.
Telecom Italia acquired Elefante TV and Delta TV	100% each	128	2%	-33%	-31%	98%	32%	Description states that now cover 70% of Italian market thus large amount allocated to frequencies and broadcast rights. Also states the importance of the Elefante brand, but nothing allocated to brand. No explanation of goodwill.
Telefonica acquired Cesky Telecom	69%	3, 662	118%	-75%	43%	32%	25%	Did not identify which "other intangibles" received allocations. Trademark and customer list are described as driving forces, but nothing allocated. No explanation for 25% goodwill
Telefonica acquired Radiocomunicaciones Móviles S.A. and	100%	837 (total)	84%	-85%	-2%	10%	92%	No explanation to the intangible assets recognized (reported as "Other intangible assets"). Nothing allocated to the customer base, despite these acquisitions provided the group with 20 mln new customers. No explanation to

Company and acquisition	Percent acquired	Acquisition price ¹	Percentage allocated to					Comments
			Pre-acquisition assets (adjusted to fair values)	Liabilities, minority interest and similar items	Pre-acquisition other net assets	Intangible assets from acquisition	Goodwill	
Telefónica Móviles Chiles S.A.								the allocation of 92% of the purchase price to “Goodwill”.
Telenor subsidiary acquired DATC and UCOM (Thailand)	75% and 86.2%	333.4	69%	-407%	-338%	354%	84%	Does not identify pre-acquisition values for intangibles arising from acquisition thus likely distorting extremely large percentage to intangibles from acquisition. Amounts identified for customer base, concession rights, trademarks, software and roaming agreements,

¹ In millions of Euros. Approximate exchange rates on transaction dates for non-euro currencies.

Table 3(Continued). Telecom Companies reporting of acquisitions in 2005

Company and acquisition	Percent acquired	Acquisition price ¹	Percentage allocated to				Goodwill	Comments
			Pre-acquisition assets (adjusted to fair values)	Liabilities, minority interest and similar items	Pre-acquisition net assets	Intangible assets from acquisition		
Telenor acquired Bredbandbolaget	100%	566	18%	-34%	-16%	17%	99%	Does not identify pre-acquisition values for intangibles arising from acquisition. Allocated amounts to customer base, trademarks, software and other intangibles. The company emphasizes the benefit of a common Nordic platform but allocates only 17% to intangibles. Goodwill is explained as anticipated profits and synergies with no additional discussion to explain or justify large percentage.
Telenor acquired CyberCity	100%	166	21%	-33%	-12%	32%	81%	Does not identify pre-acquisition values for intangibles arising from acquisition. Allocated amounts to customer base, trademarks, and software. No explanation of amounts allocated to intangibles and goodwill.
TeliaSonera acquired Volvik (now Chess)	100%	235	35%	-34%	1%	6%	93%	The company strengthened its position in Norway and emphasized growth potential in home markets, but allocated only 6% to subscriber contacts. No justification of 93% allocated to goodwill.
Vodafone ² acquired Clear Stream	100%	2,795	36%	-48%	-12%	40%	72%	Reported amounts to license and spectrum fees and to other intangibles, but did not show beginning balances. Goodwill is explained. Goodwill is explained as profits and synergies from acquired company.
Vodafone ² acquired VemFin	99%	2,126	23%	-24%	-1%	41%	60%	Reports amounts allocated to license and spectrum fees but does not show beginning amounts of each. Goodwill is attributed to synergies and profits of acquired company.

¹ In millions of Euros. Approximate exchange rates on transaction dates for non-euro currencies.

² Vodafone reports on a fiscal year ending 31 March. Acquisitions are those reported in the annual report for year ended 31 March 2006

Table 4. Telecom Companies reporting of acquisitions in 2006

Company and acquisition	Percent acquired	Acquisition price ¹	Percentage allocated to				Goodwill	Comments
			Pre-acquisition assets (adjusted to fair values)	Liabilities, minority interest and similar items	Pre-acquisition Net Assets	Intangible assets from acquisition		
Deutsche Telekom subsidiary acquired Gedas group	100%	300	114%	-114%	0%	31%	69%	Company emphasizes technical expertise and specialized customer base, but allocates little to intangibles. No explanation of amounts to intangibles from acquisition and no explanation of large amount allocated to Goodwill.
Deutsche Telekom subsidiary acquired Tele-ring	100%	1,300	43%	-11%	32%	18%	50%	Company says assembled workforce value included in goodwill because intangible asset criteria not fulfilled; synergies included in goodwill because included in negotiated price. No additional explanation for amounts.
Deutsche Telekom subsidiary bought Polska Telefonia	48% to bring total to 97%; now must consolidate	1,600 in 2006; 1,800 previous, total 3,400	42%	-31%	11%	39%	50%	Information inadequate to understand allocations; we used informed guesses. No explanation of benefits of combination, allocations to new intangible assets nor goodwill
Elisa acquired Lounet	80%	9.2	108%	-28%	80%	17%	3%	Intangible assets from acquisition allocated entirely to customer base. No explanation for relatively large amounts allocated to pre-existing assets.
France Telecom acquired Diwan Group	99.5%	39 in two stages	n/a	n/a	n/a	n/a	120%	No details about allocations in 2006 other than to goodwill and intangibles although required and provided details in 2005. No explanation of large percentage of goodwill
France Telecom acquired Jitco, holding company for Jordan Telecommunications (JTC) and share directly in (JTC)	100% of Jitco and directly or indirectly 51% of JTC	?			?	?	?	Conflicting amounts of acquisition prices given in different parts of annual report. Reported amounts allocated to goodwill and to trademarks, license, and customer base; cannot determine percentages. Did not give amounts for other items other than deferred tax liability. Did not give information about other items allocated. No explanation for amounts allocated to goodwill.
Telefonica acquired O2	100% in two stages in 2005 and 2006	26,135	63%	-30%	33%	31%	36%	Described how amounts measured for licenses, customer base, and trademark but did not give amounts allocated to each item.

¹ In millions of Euros. Approximate exchange rates on transaction dates for non-euro currencies.

Table 4 (Continued). Telecom Companies reporting of acquisitions in 2006

Company and acquisition	Percent acquired	Acquisition price ¹	Percentage allocated to				Goodwill	Comments
			Pre-acquisition assets (adjusted to fair values)	Liabilities, minority interest and similar items	Pre-acquisition net assets	Intangible assets from acquisition		
Telefonica acquired Colombia de Telecomunicaciones	50% plus one share; committed to purchase remainder	578	424%	-456%	-32%	1%	131%	Apparent non-compliance with IFRS on computing acquisition price did not include commitment to acquire minority interests. No explanations of large percentages allocated to assets and liabilities, and very small amounts to intangibles, as well as no explanation of relatively large goodwill.
Telenor acquired Vodafone Sweden to become Telenor Sweden	100%	946	106%	-42%	64%	33%	3%	Allocated amounts to customer base, roaming agreements, and software; did not allocate anything to "other intangibles". Very small percentage to goodwill.
Telenor acquired Mobil63 Serbia to become Telenor Serbia	100	1,482	31%	-2%	29%	12%	59%	Allocated amounts to customer base and roaming agreements; did not allocate anything to "other intangibles". No explanation for large amount to goodwill
Telenor acquired various companies, individually immaterial	various	290	36%	-33%	3%	24%	73%	Allocated amounts to customer base, licenses, contracts, technology, trademarks, and software; did not allocate anything to "other intangibles. No explanation for large percentage of goodwill
TeliaSonera acquired Xfera	100%	152	350%	-328%	22%	0%	78%	Some adjustment amounts to net assets not clear. No allocations to intangibles even though Xfera has existing 3G network. No explanation of goodwill.
TeliaSonera acquired NextGenTel	100%	250	51%	-39%	12%	9%	79%	Allocated 10% to customer base even though second largest in Norway; nothing to "other intangibles. No explanation for large amount to goodwill.
Vodafone ² acquired Telsim	100%	3764	14%	-10%	4%	34%	62%	Allocated amounts to licenses and spectrum and about 30% to "other intangibles" Goodwill is assigned to Eastern Europe, presumably a CGU. Goodwill is attributed to profits and synergies. Most of the goodwill will be tax deductible

¹ In millions of Euros; approximate exchange rates on transaction dates for non-euro currencies.

² Vodafone reports on a fiscal year ending 31 March. Acquisitions are those reported in the annual report for year ended 31 March 2007

Table 5. Telecom Companies reporting of acquisitions in 2007

Company and acquisition	Percent acquired	Acquisition price ¹	Pre-acquisition assets (adjusted to fair values)	Percentage allocated to				Comments
				Liabilities, minority interest and similar items	Pre-acquisition net assets	Intangible assets from acquisition	Goodwill	
Deutsche Telekom subsidiary acquired Orange Nederland	100%	1,200	72%	-18%	54%	12%	33%	Goodwill described as reflecting positive future earnings and savings from synergies. No explanation of intangible assets from acquisition.
Deutsche Telekom subsidiary acquired Immobilien Scout	99% in stages	400	10%	-13%	-4%	33%	71%	Goodwill described as reflecting positive future earnings and savings from synergies. No explanation of intangible assets from acquisition.
Elisa individually insignificant acquisitions	various	11	63%	-31%	32%	58%	10%	Allocation to customer base and to technology acquired; nothing to “other intangibles”.
France Telecom acquired ya.com	100%	150	n/a	n/a	n/a	n/a	83%	France Telecom provides information about acquisition price and goodwill amounts. Little information is given about other amounts. Numbers provided by company do not reconcile mathematically. Very limited information about amounts allocated to individual intangible assets from the acquisition. No explanation for goodwill.
France Telecom acquired Orange Moldova	Additional stake now 94%	103	n/a	n/a	n/a	n/a	83%	
France Telecom indirectly acquired VOX Mobile	100%	80	n/a	n/a	n/a	n/a	89%	
France Telecom acquired Groupe Silicomp	96%	93	n/a	n/a	n/a	n/a	75%	
Telecom Italia acquired net assets of AOL Germany	All of net assets	669	6%	-12%	-6.4%	19%	87%	Allocated amounts to customer relationships and audience agreements; nothing to “other intangibles”. No explanation of large amount to goodwill
Telecom Italia acquired InterNLnet	100%	5.5			27%	18%	55%	Did not present details of amounts allocated to pre-acquisition assets or liabilities. Amounts provided by company do not reconcile mathematically. Did not describe intangible assets from the combination nor discuss factors attributed to goodwill
Telenor acquired Tele2 Denmark	100%	76.2	142%	-105%	37%	30%	33%	Allocated to customer base, software, and trademarks; nothing to “other intangibles”.
Telenor individually insignificant acquisitions	various	104.5	37%	-24%	13%	31%	56%	Allocated to customer base, licenses, and trademarks; nothing to “other intangibles”

¹ In millions of Euros. Approximate exchange rates on transaction dates for non-euro currencies.

Table 5 (Continued). Telecom Companies reporting of acquisitions in 2007

Company and acquisition	Percent acquired	Acquisition price ¹	Pre-acquisition assets (adjusted to fair values)	Percentage allocated to				Comments
				Liabilities, minority interest and similar items	Pre-acquisition net assets	Intangible assets from acquisition	Goodwill	
TeleisSoner acquired Cygate	100%	75.2	46%	-41%	5%	56%	39%	Allocated amounts to trade names, customer relationships, and partner agreements with suppliers; nothing to “other intangibles”.
TeliaSonera acquired debitel Danmark	100%	110.2	67%	-48%	19%	14%	67%	Allocated amount to customer relationships and a small amount to “other intangibles”
TeliaSonera acquired MCT	100%	192.7	54%	-76%	-23%	39%	83%	Allocated to customer relationships, licenses, and interconnect agreements,. NO explanation for relatively large amount of goodwill.
TeliaSonera individually insignificant acquisitions	various	17			27%		73%	Provided few details about composition of net assets and did not identify intangibles separately
Vodafone ² acquired Hutchison Essar	100%	8,072	32%	-59%	-28%	56%	72%	Allocated relatively almost all of intangible amount to licenses and spectrum; minor amounts to “other intangibles”. Goodwill attributed to profits and synergies.
Vodafone ² acquired Tele2 activities in southern Europe	100%	644	58%	37%	21%	23%	56%	The entire amount of the intangibles is allocated to “other intangibles” without explanation. Goodwill attributed to profits and synergies.

¹ In millions of Euros. Approximate exchange rates on transaction dates for non-euro currencies.

² Vodafone reports on a fiscal year ending 31 March. Acquisitions are those reported in the annual report for year ended 31 March 2008

Table 6. Telecom Companies reporting of acquisitions in 2008

Company and acquisition	Percent acquired	Acquisition price ¹	Pre-acquisition assets (adjusted to fair values)	Percentage allocated to				Comments
				Liabilities, minority interest and similar items	Pre-acquisition net assets (adjusted to fair values)	Intangible assets from acquisition	Goodwill	
Deutsche Telekom subsidiary acquired SunCom	100%	1,100	114%	-88.8%	24%	0%	76%	Nothing allocated to intangibles from acquisition; pre-acquisition intangibles written down. Company describes goodwill as reflecting growth opportunities in the USA, customer base, synergies due to reduction of roaming costs and similar items but notably does not allocate acquisition price to customer base..
Elisa individually insignificant acquisitions	various	6.1	57%	-39%	18%	28%	54%	Allocation to customer base and to immaterial rights; nothing to "other intangibles".
French Telecom consortium acquires Telecom Kenya	51%	273	122%	-131%	-9%	30%	79%	Allocated to customer base and software; nothing allocated to "other intangibles". Goodwill attributed to assembled workforce, anticipated profits, and deferred taxes related to excess.
Telefonica subsidiary acquired parent and operating company Telering Brazil	91% of parent and 59% of subsidiary	451	150%	-179%	-28%	121%	8%	Did not provide details of amounts allocated to each intangible asset but provides extensive details elsewhere about many different intangible assets.
Telenor acquired IS Partner	100%	160	64%	-48%	16%	12%	71%	Allocated amounts to customer base, software, and trademarks; nothing to "other intangibles".
Telenor individually insignificant acquisitions	various	54	126%	-56%	22%	8%	70%	Allocated to customer base, software and trademarks; approximately 6% to "other intangibles" Goodwill is attributed to employees, anticipated profits and deferred taxes related to excess values.
TeliaSonera acquired TelenorSonera Asia	51%	348	68%	-49%	20%	0%	80%	Did not allocate anything to other intangibles. Reduced pre-existing goodwill (approximately 543 million euro) of acquired company to zero, No explanation of goodwill amounts.
TeliaSonera individually insignificant acquisitions	various	46			-4%	0%	104%	Did not disclose details of allocations; no information about intangible assets
Vodafone ² acquired	70%	617	42%	41%	1%	28%	71%	Allocated amounts to license and spectrum fees and relatively

Company and acquisition	Percent acquired	Acquisition price ¹	Pre-acquisition assets (adjusted to fair values)	Percentage allocated to				Comments
				Liabilities, minority interest and similar items	Pre-acquisition net assets (adjusted to fair values)	Intangible assets from acquisition	Goodwill	
Ghana Telecommunications								small amount to "other intangible assets". Goodwill is attributed to expected profits and synergies
Vodafone individually insignificant acquisitions	various	575			30%	0%	70%	Did not disclose details of allocations; no information about intangible assets

¹ In millions of Euros. Approximate exchange rates on transaction dates for non-euro currencies

² Vodafone reports on a fiscal year ending 31 March. Acquisitions are those reported in the annual report for year ended 31 March 2009.

Table 2. Goodwill as a percentage of total assets by company by year

Company	2005	2006	2007	2008
Deutsche Telekom	14.4%	16.1%	17.1%	16.8%
Elisa	35.0%	36.9%	35.6%	38.3%
France Telecom	30.8%	30.5%	31.0%	32.3%
Telecom Italia	45.8%	48.9%	50.8%	51.3%
Telefonica	12.2%	19.9%	18.7%	18.3%
Telenor	16.6%	20.6%	18.4%	18.3%
TeliaSonera	30.8%	31.4%	32.8%	31.9%
Vodafone ¹	41.5%	37.0%	40.3%	35.3%

¹ Vodafone reports on a fiscal year ending 31 March. Data are taken from the annual reports of 31 March 2006, 2007, 2008, and 2009.

Table 7. CGUs for Impairment testing purposes

Company	Number of CGUs to which goodwill has been allocated	Level of the CGUs to which goodwill has been allocated for impairment testing			Number of Segments	Number of Subsidiaries
			No. Of CGUs at each level	% of goodwill allocated to each level		
Deutsche Telekom	5	Business unit level	5	100%	4	350
Elisa	3	Primary segment level	3	100%	3	43
France Telecom	6	Group of CGUs	4	98%	4	255
		Primary segment level	2	2%		
Telecom Italia	5	Single company level	3	n/a	5	150
		Business	2	n/a		

		unit level				
Telefonica	n/a	n/a	n/a	n/a	7	340
Telenor	8	Single company level	5	55%	10	81
		Primary segment level	3	45%		
TeliaSonera	4	Single company level	4	100%	10	60
Vodafone	5	Primary segment level	4	100%	9	25

Figure 1. Allocation of Acquisition Cost in 2005

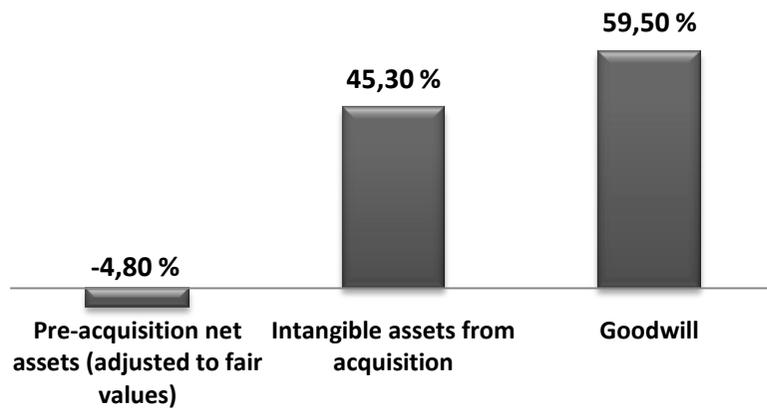


Figure 2. Allocation of Acquisition Cost in 2006

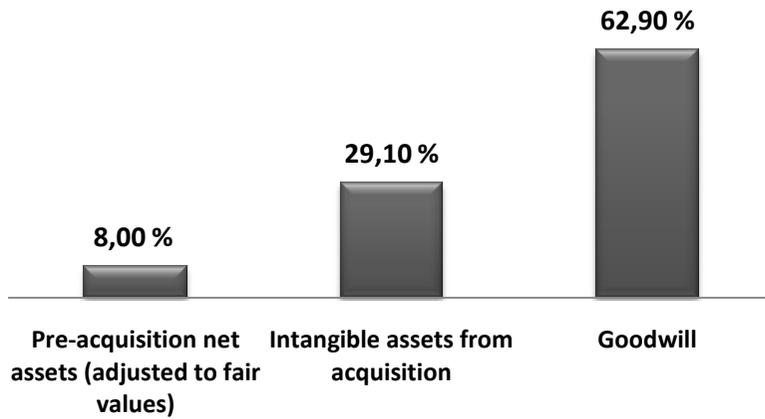


Figure 3. Allocation of Acquisition Cost in 2007

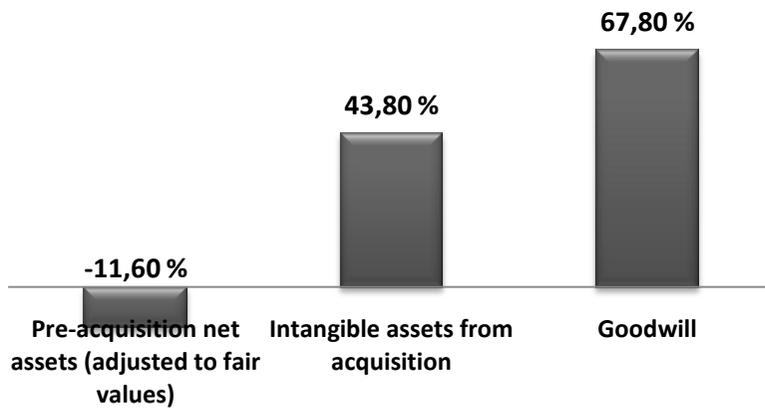


Figure 4. Allocation of Acquisition Cost in 2008

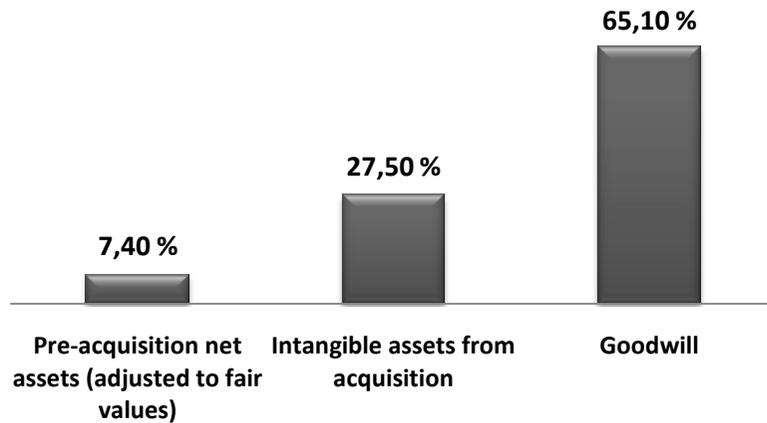
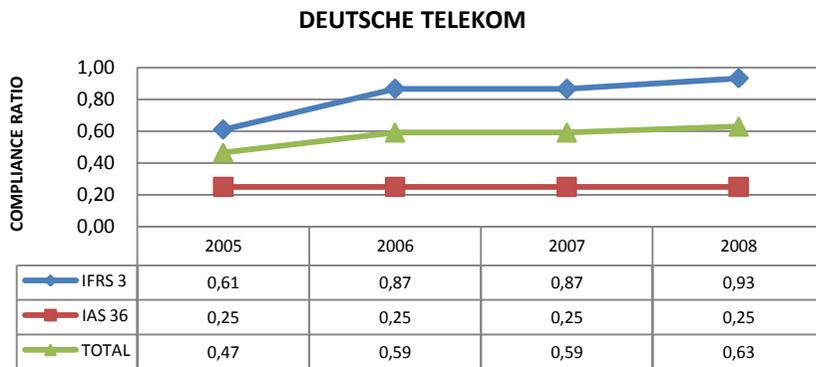
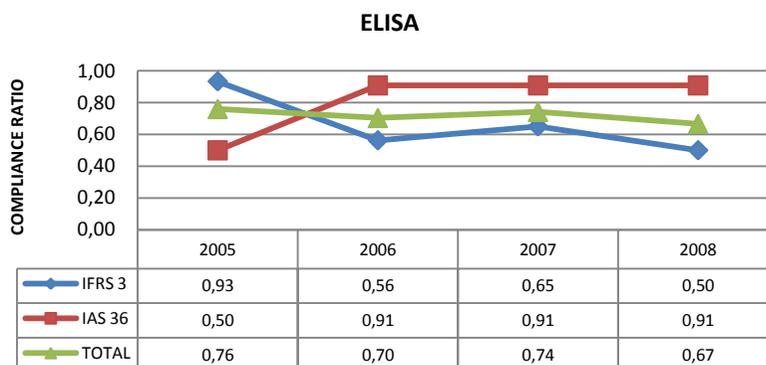


Figure 5. Level of Compliance by year and Standard of Deutsche Telekom



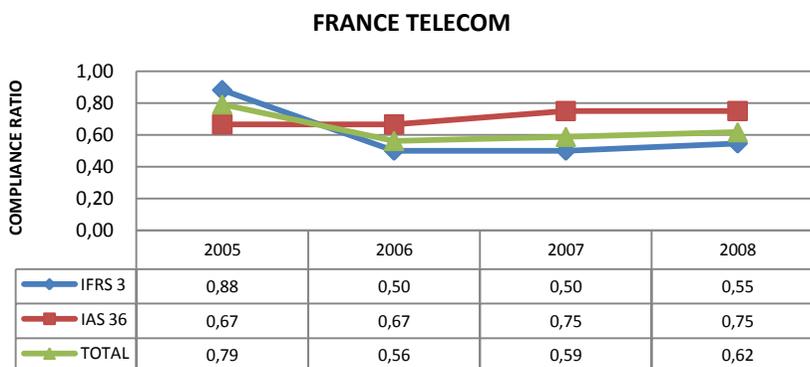
Deutsche Telekom presents a high level of compliance with IFRS 3 disclosure requirements and an extremely low ratio for IAS 36 disclosures. The IFRS 3 disclosure ratios are steadily improving throughout the four year period while the IAS 36 ratios are steady at 0.25. In all of the four years, the company discloses only some of the specified information about the bases on which its CGUs' recoverable amounts (value in use) are determined. Moreover it does not disclose any information about the sensitivity tests it should perform.

Figure 6. Level of Compliance by year and Standard of Elisa



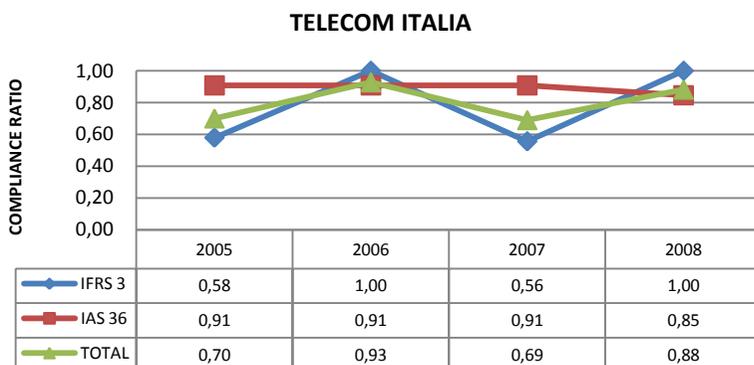
During the first four years of IFRS implementation, Elisa improves considerably its level of compliance with IAS 36 disclosure requirements (from 0.50 to 0.91) while it deteriorates its level of compliance with IFRS 3 requirements (from 0.93 to 0.50). The main reason that leads to the improvement of IAS 36 ratio is the improvement of disclosures about sensitivity tests. The main reasons that lead to the deterioration of IFRS 3 ratio are: 1) disclosures about profit or loss included in acquirer's results, 2) disclosures about the revenue and the profit or loss of the combined entity as though the acquisition date had been the beginning of the period, and 3) disclosures of the factors that contributed to a cost that results in goodwill recognition.

Figure 7. Level of Compliance by year and Standard of France Telecom



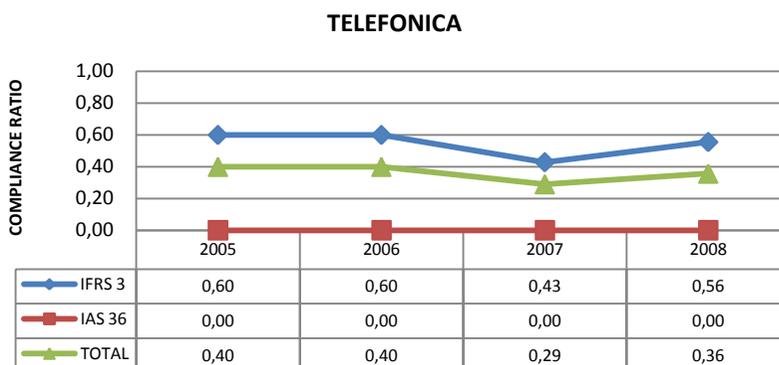
In 2005, France Telecom interestingly presents a better level of compliance with IFRS 3 disclosure requirements than in the three following years. The main reasons for the low level of compliance with IFRS 3 requirements are disclosure items about the revenue and the profit or loss of the combined entity as though the acquisition date had been the beginning of the period and the factors that contributed to a cost that results to goodwill recognition. By contrast, the company presents an improved ratio for IAS 36 disclosures throughout the four years. The main reason of the improvement is located in disclosures about the sensitivity analysis.

Figure 8. Level of Compliance by year and Standard of Telecom Italia



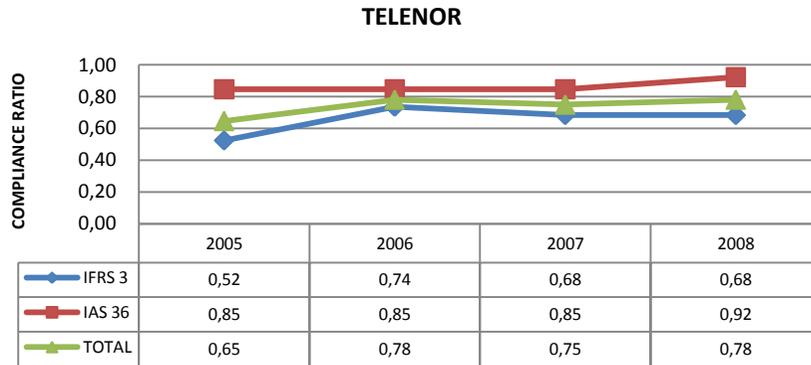
Telecom Italia presents substantial variations in IFRS 3 compliance ratios among years. On the one hand in two years it complies with all applicable disclosure items and on the other hand in two years it complies only with half of them. This variation can be attributed to the lack of acquisitions in these two years and hence it is subject only to the basic quantitative disclosure items IFRS 3 mandates. For IAS 36 disclosure items, the company shows a high level of compliance throughout the four year period.

Figure 9. Level of Compliance by year and Standard of Telefonica



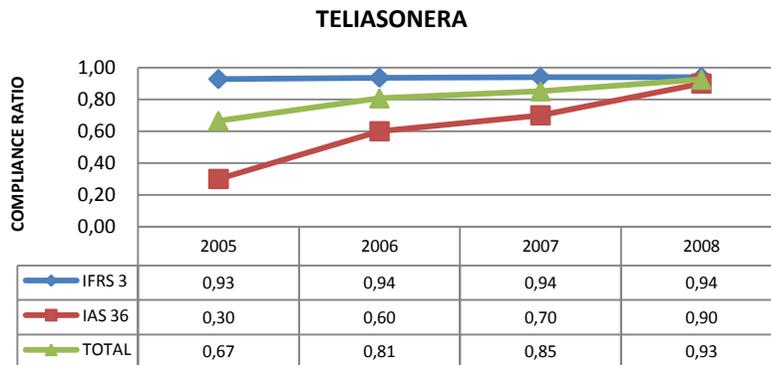
Telefonica does not disclose any information mandated by IAS 36. Moreover it also presents a relatively low level of compliance with IFRS 3 disclosure requirements. The main reasons for such low levels are lack of: 1) disclosure requirements about the profit or loss included in acquirer's results, 2) disclosures about the revenue and the profit or loss of the combined entity as though the acquisition date had been the beginning of the period, and 3) disclosures about the factors that contributed to a cost that results in goodwill recognition.

Figure 10. Level of Compliance by year and Standard of Telenor



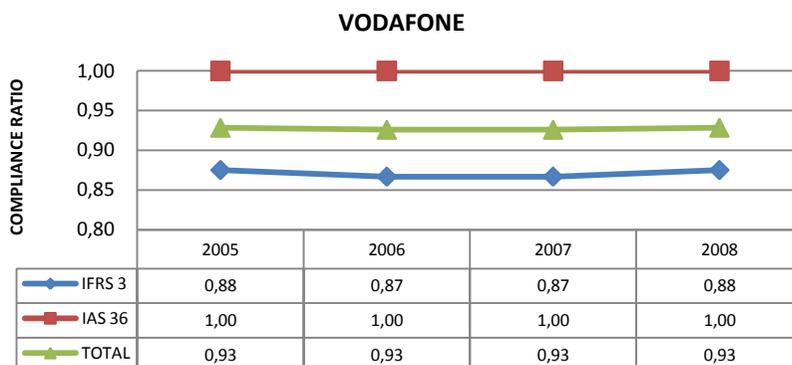
Telenor presents an improvement of its level of compliance during the first four years of IFRS mandatory implementation. Specifically it highly complies with IAS 36 disclosure requirements, while its ratio is lower for IFRS 3 requirements. The main reasons for the lower level of compliance with IFRS 3 requirements are related to disclosures items about the revenue and the profit or loss of the combined entity as though the acquisition date had been the beginning of the period and on the items, and the factors that contributed to a cost that results in goodwill recognition.

Figure 11. Level of Compliance by year and Standard of Teliasonera



Teliasonera presents the most substantial improvement over the four years. The overall level of compliance is 38% higher in 2008 than in 2005. This improvement is attributed to IAS 36 disclosures ratio which increased from 0.30 in 2005 to 0.90 in 2008.

Figure 12. Level of Compliance by year and Standard of Vodafone



Vodafone is the only of the eight companies that presents consistently strong positive compliance ratios. In all four years the company's level of compliance with IAS 36 disclosure requirements is 1. Also IFRS 3 compliance ratios are high. In general Vodafone has the highest total disclosure ratio among the eight companies (0.93).

Appendix 1. Number of companies that comply with specific disclosure requirements of IFRS 3 and IAS 36 by year

		2005			2006			2007			2008			N
		C	NC	NA	C	NC	NA	C	NC	NA	C	NC	A	
IFRS 3	Business combinations													
IFRS 3 Par. 62	Acquirer has adjusted provisional values determined at time of initial accounting for business combination, in accordance with requirements of paragraph 62 of IFRS 3, comparative information presented for periods before initial accounting for the combination is complete (i.e. for periods before adjustments are made) shall be presented as if initial accounting had been completed from acquisition date.	0	0	8	0	1	7	1	0	7	1	0	7	
IFRS 3 Par. 67	For each material business combination effected during the period, acquirer shall disclose:													
IFRS 3.67(a)	a) the names and descriptions of combining entities or businesses;	8	0	0	7	0	1	8	0	0	7	0	1	
IFRS 3.67(b)	b) the acquisition date;	8	0	0	7	0	1	8	0	0	7	0	1	
IFRS 3.67(c)	c) percentage of voting equity instruments acquired;	8	0	0	7	0	1	7	1	0	7	0	1	

IFRS 3.67(d)	d) cost of the combination, and a description of the components of that cost, including any costs directly attributable to the combination;	8	0	0	7	0	1	8	0	0	6	1	1
IFRS 3.67(d)	e) where equity instruments are issued or issuable as part of cost of combination, the following information:												
	i) number of equity instruments issued or issuable;	0	0	8	0	0	8	1	0	7	0	0	8
	ii) fair value of the equity instruments issued or issuable; and	0	0	8	0	0	8	1	0	7	0	0	8
	iii) basis for determining that fair value;	0	0	8	0	0	8	1	0	7	0	0	8
IFRS 3.67(d)	f) in disclosing basis for determining fair value of equity instruments issued or issuable as part of cost of the combination, if published price for the instruments did not exist at date of exchange, significant assumptions used to determine fair value;	0	0	8	0	0	8	0	0	8	0	0	8
IFRS 3.67(d)	g) in disclosing basis for determining fair value of equity instruments issued or issuable as part of cost of combination, if a published price for instruments existing at date of exchange, but was not used as basis for determining cost of combination:												
	i) that fact;	0	0	8	0	0	8	0	0	8	0	0	8
	ii) reasons published price was not used;	0	0	8	0	0	8	0	0	8	0	0	8
	iii) method and significant assumptions used to attribute a value to the equity instruments; and	0	0	8	0	0	8	0	0	8	0	0	8
	iv) aggregate amount of difference between value attributed to, and published price of, equity instruments;	0	0	8	0	0	8	0	0	8	0	0	8

Appendix 1 (Continued). Number of companies that comply with specific disclosure requirements of IFRS 3 and IAS 36 by year

2005

2006

2007

2008

IFRS 3.67(e)	h) details of any operations entity has decided to dispose of as a result of business combination;	0	0	8	0	0	8	0	0	8	0	0	8
IFRS 3.67(f)	i) amounts recognised at acquisition date for each class of the acquiree's' assets, liabilities and contingent liabilities;	8	0	0	6	1	1	6	2	0	6	1	1
IFRS 3.67(f)	j) unless disclosure would be impracticable, carrying amounts of each class of acquiree's assets, liabilities and contingent liabilities, determined in accordance with IFRSs, immediately before combination;	7	1	0	6	1	1	6	2	0	6	1	1
IFRS 3.67(f)	k) if disclosure of IFRS carrying amounts immediately before combination is impracticable, that fact, together with an explanation of why.	0	1	7	0	1	7	0	2	6	0	1	7
IFRS 3.67(h)	l) a description of the factors that contributed to a cost that results in the recognition of goodwill:												
	i) a description of each intangible asset that was not recognised separately from goodwill; and	2	6	0	2	5	1	1	7	0	2	5	1
	ii) an explanation of why intangible assets' fair value could not be measured reliably;	0	8	0	0	7	1	0	8	0	0	7	1
IFRS 3.67(g)	m) in respect of any excess of acquirer's interest in net fair value of acquiree's identifiable assets, liabilities and contingent liabilities over cost:												
	i) the amount of any such excess recognised in profit or loss in accordance with paragraph 56 of IFRS 3; and	0	0	8	0	0	8	0	0	8	0	0	8
	ii) line item in the statement of comprehensive income in which excess is recognised;	0	0	8	0	0	8	0	0	8	0	0	8
IFRS 3.67(h)	n) a description of nature of any excess of acquirer's interest in net fair value of acquiree's identifiable assets, liabilities and contingent liabilities over cost, recognised in profit or loss in accordance with paragraph 56 of IFRS 3;	0	0	8	0	0	8	0	0	8	0	0	8
IFRS 3.67(i)	o) unless impracticable, amount of the acquiree's profit or loss since the acquisition date included in the acquirer's profit or loss for the period; and	4	4	0	4	3	1	4	4	0	4	3	1
IFRS 3.67(i)	p) if impracticable to disclose amount of acquiree's profit or loss since acquisition date included in acquirer's profit or loss for period that fact; and an explanation of why .	0	4	4	0	3	5	0	4	4	0	3	5
IFRS 3 Par. 69	If initial accounting for a business combination that was effected during period has been determined only provisionally as described in paragraph 62 of IFRS 3, entity shall disclose that fact and an explanation of why.	0	3	5	0	1	7	0	4	4	1	2	5
IFRS 3 Par. 70	Unless impracticable, the following information shall be disclosed:												
IFRS 3.70(a)	a) revenue of the combined entity for period as though acquisition date for all business combinations effected during period had been beginning of period; and	4	4	0	3	4	1	3	5	0	3	4	1

IFRS 3.70(b)	b) profit or loss of combined entity for period as though acquisition date for all business combinations effected during period had been beginning of period.	4	4	0	3	4	1	3	5	0	3	4	1
IFRS 3.70	If disclosure of information required by paragraphs 70(a) and 70(b) of IFRS 3 would be impracticable, entity shall disclose that fact and explanation.	0	4	4	0	4	4	0	5	3	0	4	4

Appendix 1 (Continued). Number of companies that comply with specific disclosure requirements of IFRS 3 and IAS 36 by year

IFRS 3 Par. 73	The entity shall disclose:												
IFRS 3.73(a)	a) amount, and an explanation, of any gain or loss recognised in current reporting period that relates to identifiable assets acquired or liabilities or contingent liabilities assumed in a business combination that was effected in either current or previous period and is of such a size, nature or incidence that disclosure is relevant to an understanding of combined entity's financial performance;	0	0	8	0	0	8	0	0	8	0	0	8
IFRS 3.73(b)	b) if initial accounting for a business combination that was effected in immediately preceding period was determined only provisionally at end of that period, amounts, and explanations, of adjustments to provisional values recognised during current period; and	0	0	8	1	0	7	0	0	8	1	0	7
IFRS 3 Par. 75	Entity shall disclose a reconciliation of carrying amount of goodwill at beginning and end of period, showing separately:												
IFRS 3.75(a)	a) gross amount and accumulated impairment losses at beginning of period;	8	0	0	8	0	0	8	0	0	8	0	0
IFRS 3.75(b)	b) additional goodwill recognised during period, except where that goodwill is included in a disposal group that, on acquisition, meets criteria to be classified as held for sale in accordance with IFRS 5 <i>Non-current Assets Held for Sale and Discontinued Operations</i> ;	8	0	0	7	0	1	8	0	0	7	0	1
IFRS 3.75(c)	c) adjustments resulting from subsequent recognition of deferred tax assets during period in accordance with paragraph 65 of IFRS 3;	0	0	8	0	0	8	0	0	8	0	0	8
IFRS 3.75(d)	d) goodwill included in a disposal group classified as held for sale in accordance with IFRS 5 and goodwill de-recognised during period without having previously been included in a disposal group classified as held for sale;	7	0	1	6	0	2	5	0	3	4	0	4
IFRS 3.75(e)	e) impairment losses recognised during period in accordance with IAS 36 <i>Impairment of Assets</i> ;	3	0	5	2	0	6	2	0	6	3	0	5
IFRS 3.75(f)	f) net exchange differences arising during period in accordance with IAS 21 <i>The Effects of Changes in Foreign Exchange Rates</i> ;	5	0	3	5	0	3	6	0	2	5	0	3
IFRS 3.75(g)	g) any other changes in the carrying amount during the period; and	1	0	7	0	0	8	3	0	5	2	0	6
IFRS 3.75(h)	h) gross amount and accumulated impairment losses at end of period.	8	0	0	8	0	0	8	0	0	8	0	0

RECENT DEVELOPMENTS OF THE FINANCIAL REPORTING MODEL: THEORETICAL STUDIES IN REVIEW

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Our paper analyzes the manner in which the financial reporting model evolved towards fair value accounting. After a brief introduction into the context of financial reporting at international level, the analysis focuses on the accounting model of fair value. This is done by synthesizing main studies in accounting research literature that analyze fair value accounting through a theoretical approach. The analysis being developed relies on literature review methodology. The main purpose of the developed analysis is to synthesize main pros and cons as being documented through accounting research literature. Our findings underline both the advantages and shortcomings of fair value accounting and of the recent mixed attribute in nowadays financial reporting practices. The concluding remarks synthesize the obtained results and possible future developments of our analysis.

Keywords: fair value, accounting research literature, mixed attribute, pros, cons.

JEL Code: M41.

1. Introduction and theoretical background

Questions regarding the identification of the most adequate values for assets and debts evaluation, and the manner in which changes that occurred in these values should be reported, are directly linked by other considerations connected to the nature and goal of the financial reporting (Gwilliam and Jackson, 2008). In the extreme case of economical models that target general equilibrium, when all information is embedded in the individual prices of assets, the fact that traditional financial reporting (in regard to the balance sheet and the profit and loss account) has a reduced, but not inexistent role is unanimous accepted (Barth and Landsman, 1995; Beaver and Demski, 1979; Walker, 1988).

In a real environment, one that assumes the imperfections of available information and a degree of uncertainty, financial reporting has the potential in playing a series of roles, both in retrospective - in terms linked to stewardship*****, contract signing capacity, employee selection, resource consumption decisions, distribution, etc.; and in perspective - in terms referring to the anticipation capacity or to the, value, moment and probability of future cash-flows. In this context, the conceptual framework outlined by various accounting standard setting bodies such as the Financial Accounting Standards Board (US), the International Accounting Standards Board, and the Accounting Standards Board (UK), represents their attempt to offer, or at least to articulate, their own vision on a normative accounting foundation, and to identify a series of qualitative characteristics belonging to a “better” financial reporting in terms of relevance, credibility, etc. (Gwilliam și Jackson, 2008). In the US, recognizing assets and debts

***** An additional role of accounting given that the market is not perfect and complete; a series of big entities entrust their assets and decisions to managers, having an informational advantage in terms of the degree of the decisions' adequacy; however it is difficult to conclude if a manger took some decisions that are inconsistent in relation to the shareholders goals; in other words, the shareholder cannot be certain if he “acquires” the decision he wants; accounting information can be useful in offering necessary incentives for diminishing the effects of the managers private information, and in supporting the company's' value growth

at fair value seems also to be favored by the Securities and Exchange Commission. In a report made for a Congress of the SEC (SEC, 2005), we can observe two major benefits of imposing fair value accounting for financial instruments. The first one would be the reduction in use of transactions structured in purely accounting ways by focusing on the exploitation of opportunities generated by managerial earnings created by the “mixed attribute” model - partially historical costs, partially fair values. The second one refers to fair value accounting of financial instruments which would lead to a reduction in the complexity of financial reporting, consequence of mixed attribute. Evidently, as the SEC report noted, there also are costs that are associated to the use of fair value.

A key aspect is the possibility to evaluate elements of financial statements at fair values, especially in the case of those financial instruments for which there aren't any active markets. Although market value is the recommended evaluation for fair value, the FASB adopted the term of “fair value” instead of market value, so that to underline the estimations of value necessary for financial instruments which are not traded on active markets. Both the FASB and IASB recommend, through the conceptual framework, the consideration of the cost/benefit report between relevance and credibility, when determining the optimum evaluation method for certain elements, analyzing if that evaluation has enough credibility to be recognized in financial situations. For investors, the assumed cost of fair value evaluations consists in the possibility, that one or more financial instruments might not be evaluated precisely enough to help them in their estimations regarding the financial position of the company and its potential to generate future benefits. This relevance cost is the consequence of the fact that in the absence of active markets for certain financial instruments, the management of the company must use fair value in its estimations, which leaves room for subjectivism and manipulation. Evaluating the costs and benefits of fair value accounting in the case of financial reporting, costs which affect investors and other users of accounting information in specific reporting systems is a difficult task (Matiş and Bonaci, 2008). The remainder of our paper is organized as follows: some research methodology aspects are discussed, the main part of the paper deals with analyzing theoretical studies in the area of fair value accounting in order to synthesize pros and cons being documented through accounting research literature, and finally we conclude upon the developed analysis by also formulating some future developments that might complement our study.

2. Research methodology

Our paper uses literature review methodology in order to develop a critical and evaluative account of what has been published within accounting research literature on fair value accounting by only considering studies that develop a theoretical approach. Therefore, the purpose of such an analysis in the area of literature review studies is to summarise, synthesise and analyse the arguments of studies being analyzed. Besides developing a summary of sources in the approached area, the employed research methodology imposes a certain organizational pattern that combines both summary and synthesis. More precisely, our analysis of each considered study covered the following aspects: question formation, identification of the relevance, assessment of quality, evidence summarization and interpretation of findings.

3. Developing the analysis and interpreting results

There is a myriad of arguments that can be invoked in the favor of implementing fair value, such as the comparability of market values, the credibility of the information provided by market prices, the conceptual benefits of market based evaluation of financial instruments, and the accounting of risk coverage managerial decisions. Information aggregation refers to fair value in the sense of correspondence between reported (supplied) and demanded information, in this case the aspect of credibility seeming to be the main argument with the potential to limit the

implementation of fair value evaluation in future projects of accounting regulatory bodies, especially in the case of balance sheet recognition. The accounting research literature documents the preference of investors for the use of fair value as standard for financial reporting, generating a superior level in information comparability. The level of relevance obtained through use of fair value is also superior to the one of the historical costs, due to the fact that management bases its decisions on fair values, as investors do, while in fact even the managements' evaluation should rely on the obtained results, but expressed at their fair value (White, 2008). Although these arguments are extremely powerful, a series of problems emerge when referring to accounting practices, especially in terms inked to evaluation credibility. This is also true when referring to theory related aspects, mainly in terms of changes taking place in fair values and their reporting. Therefore, starting from questions that regard the reporting method for gains and losses reflected in the profit and loss account, are induced by varieties of complex aspects, which derive from different conceptions regarding what in fact is the "result" and from various perspectives on the nature and goal of financial reporting. Even if we considered a perfect environment as Hicks (1946) did, starting from the premise that at any moment given in time all cash-flows and actualization rates are known (although in the case of a partial equilibrium model these certainties become variables), a variety of result ratings can be derived from the base distinction between the results calculated as difference between net assets in two different moments (this is the main approach in accounting referential), and the result representing a sustainable value in future time frames (Gwilliam and Jackson, 2008). A series of queries are linked to the manner in which information regarding these gains and losses should be presented, referring specifically to the necessity of separation - whenever possible - of temporary gains and losses, and to achieving a distinction between gains and losses generated by management and ones generated by other causes.

We could state that the role of financial reports is to offer users, i.e. stakeholders, the possibility to evaluate the success of a company or even its management. In this context, a question arises: How should the recent earnings generated by owning shares in international oil and gas companies be reflected in accounting? The high demand on the market was further accentuated by the Middle East crisis, fueling an increase in oil and natural gas prices during 2003-2006, the price of a crude oil barrel rising from 25\$ (2003) to 70\$ (2006) (NYMEX - New York Mercantile Exchange). Therefore, we face yet another important question: to what extent should these earnings be attributed to activities performed by the management of these companies? (Gwilliam and Jackson, 2008).

The main discontents regarding aspects that affect the credibility and comparability of information supplied by using fair value for financial instruments are comprised in opinions of practitioners. They express their concerns regarding the fact that estimations using fair value in the case of similar financial instruments can vary significantly in practice; that the management has an exaggerated power of decision and influence - by choosing entry market data that will be used in the evaluation, when the prices themselves are nor offered by the market; that certain shades of assumptions used in estimation models can have significant consequence; and that verifying the prices determined using unobservable data will be extremely difficult (Reinhart, 2008). One of the main adversaries of fair value is Alex J. Pollock (American Enterprise Institute), who considers that applying fair value accounting can create various excesses within the market, both pessimistic and optimistic, through the reported results and implicitly through the capital, which in the present state of the global economy does nothing but to fuel panic. From the point of view of the derivative, when these are not traded, Pollok considers that fair value evaluation creates an opportunity for a manipulation of the system. From his somewhat ironical perspective, fair value accounting represents "the last invention of metaphysical accountants in

their search for the only true way of bookkeeping”. The arguments stated by Pollok address a series of problematic aspects that still require refining from the point of view of fair value.

For example, he mentions the situation in which the fair value of the debts of an entity decreases (which might happen due to the fact that the bonds market observes a worsening in the credit position of that entity), a case in which although the entity owes the same amount to its creditors - by the recognition of a smaller debt amount by its’ creditors - fair value evaluation would assume recognizing in return the diminishing of the debt in correspondence to an income, thus generating a “profit”.

Financial analysts also have their critics concerning the fair value concept, accentuating their role of functioning in a real world, where they have to offer decisional support to investors by operational systems and arbitrary rules of scientific models, and it is clear that the more instable entry data is, the more the analysts’ role diminishes. A compromise is therefore needed, between the utopist goals of a perfectly-transparent and efficient market and the real world, based on human actions and inefficiencies. If the general public is unable to understand or face the torrent of short term oscillations of asset prices, the net effect of fair value accounting could generate nothing but fear, anxiety and systemic instability. On the other hand, we are aware that losses, gains and volatility result from market behavior and not from financial reporting. Using fair value is also not enough, because there is a need for additional information regarding risk exposure, models and assumptions used in estimations (especially in the case of less active markets), and also regarding the changes in factors that can induce the modification of fair value (White, 2008). Radical attitudes are not useful to anyone. Instead, what would be of great use, is a collaboration based on individual experiences, so that the concept of fair value could be improved, thus becoming closer to the great goal of solving evaluation problems that have been troubling the accounting community for a few decades. Abacus published in 2008 a special issue dedicated to fair value, in which there are reproduced papers presented at the September Siena Forum in 2007 (the central theme of this forum was also fair value and conceptual framework). The respective papers cover a large number of matters concerning fair value evaluation, various initiatives of international organisms - especially IASB and FASB, etc. all of these needed for the development of a common conceptual framework. The majority of these papers resort to theoretical studies, meticulously processing the subtleties of the provisions of the regulations in cause. Following the Norwalk agreement from 2002 - through which IASB and FASB decided to strengthen their relations and to create a convergence plan for the standards they emitted - the events developed rapidly. Whittington (2008) evokes the strong affinities between the IASB and FASB conceptual framework, and the existence of important differences at the level of details. An important similar aspect between the two frameworks is the lack of an evaluation treatment, aspect which makes both frameworks incomplete (Whittington, 2008). We could say that there is still an “inheritance” of interests and some unsolved debates dating back from the 70’s when the regulating organizations fought each other on the matter of inflation accounting, trying to come up with a solution that would satisfy both the users of accounting information and the persons responsible with the preparation of financial situations. Also, the pressures and controversies from that period are also responsible for the importance of decisional utility - especially in the case of investors from the capital markets - the center of the objective of financial statements. This was a major step at that time, making the transition from the traditional vision - which stated that accounting has legal goals, which are linked to the responsibility of managers towards the shareholders - to the decisional utility, as a possible extra benefice. Later, there were opinions that considered the focus reorientation as exaggerated, according to current revisions of conceptual frameworks. Whittington (2008) and Ronen (2008) include in their works various discussions regarding the current state of provisions regarding fair value and conceptual framework, and the measures that need to be taken in this matter. Bradbury (2008) and Turley (2008) comment on their opinions,

The effects of this situation would be felt in multiple countries and regulations. For example, according to UK regulations, even though the reevaluation of long term debts was not allowed, it was always permitted for a company financed through bonds to refinance them in a manner that would allow any change in value reflecting interest rates changes to be incorporated within the profit and loss account once refinancing takes place, despite the fact that - ignoring transaction cost - the cash flow could not have been affected at all.

Creating a hybrid accounting system in which historical costs accounting is combined with the fair value one, or, in other words, a dual accounting system, is also analyzed by accounting research literature, which identifies a series of disadvantages generated by distortions of the reporting systems' coherence, thus facilitating the recognition of gaining resulted from managerial decision and embellishment of financial statements (Barlev and Haddad, 2004). Using market based evaluations can create problems for hedge operations regarding cash-flows, generating a context in which double attribute issues, therefore affecting the information provided by fair-value (Gigler et al., 2007; Shin, 2007). When assets are evaluated at values provided by the markets, and debts are not evaluated at fair value, the possibility of a significant distortion in the financial statements focused on equity is created. In this case, there are two possible outcomes: overrating or underrating that value (Wallace, 2008), depending on the interests of the distortion. Using the mixed attribute model leads to new information, this in turn can be misleading for its respective users, and reporting for hedge operations is difficult and opaque (White, 2008). Barlev and Haddad (2007: 495) succeed in underlining the connection between international accounting harmonization and the fair value accounting paradigm, by starting from the premises of the accounting comparability used in defining international accounting harmonization, the supporters of which consider necessary the elaboration of a unique set of Generally Accepted Accounting Principles – GAAP. These principles would lead, in their opinion to a complete “harmonization” at international level. They also bring to our attention the existence of a second requirement necessary for reaching a “complete harmonization”, i.e. a common denominator in the evaluation, recoding and reporting of transactions, assets, debts and equity, thus considering feasible the option of fair value paradigm, unlike the historical cost one. The concept of fair value has the capacity to offer that needed common denominator, which is necessary for the comparability of accounting information. This denominator acts like a catalyst during a harmonization cycle: fair value spreads international accounting harmonization, which in turn generates more useful information that could be beneficial for the efficiency of global markets, the final consequence of these results being increases in the quality of fair value that was evaluated in this manner (Barlev and Haddad, 2007: 498).

We conclude our analysis by stating that our findings could be completed by developing a similar analysis on studies in accounting research literature that have an empirical approach to fair value accounting and its implications.

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PROFESSIONAL JUDGMENT UNDER IFRS IN EX-COMMUNIST COUNTRIES: CASE OF ROMANIA

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The accounting rules from each country evolve in time in order to respond the social, cultural and economical environment needs. After some communist countries (as Romania, Bulgaria, Poland, Hungary, Czech Republic, Slovenia, Estonia, Lithuania, s.o.) joined the European Union an important number of local companies became to apply accounting regulation according with International Financial Reporting Standards (IFRS).

This paper surveys the theoretical and empirical literature on the possible risks for companies' management from ex-communist counties by applying (mandatory or voluntary) International Financial Reporting Standards reporting regulation and professional judgment.

Under the pressure of economic globalization all the ex-communist countries ware obliged to adopt International Financial Reporting Standards in the field of accounting. The main objective of this paper is to find out from the experience of different companies who already adopted IFRS which are the risks related to professional judgment application under IFRS on the financial statement users.

As research methodology we integrated theoretical and empirical studies from accounting and law (especially from Romanian experience) in order to contribute to the cross-fertilization of our field of interest.

As final results of our paper we find that the biggest risk of applying professional judgment prescribed by IFRS in ex-communist countries is to appear different creative accounting techniques which influence in a negative way the decision-making process for the financial statements users. During worldwide financial crisis the majority of Romanian companies tried to use in the most appropriate way the professional judgment in order to arrange their financial reports and to save company's money (in relation with local government) or to show higher performance (in relation with financial institutions) for the fund-raising process

We identified several motivations including the existence of tax levies based on income, confidence by shareholders and workers in management that is able to report stable earnings and psychological expectations relating to increases or decreases in anticipated income.

Keywords: professional judgment, IFRS, globalization, creative accounting, risk

JEL Codes: M41 - Accounting

Introduction

For several decades we observe that in many key industries companies from ex-communist countries as Romania, Bulgaria, Hungary, Czech Republic or Poland increasingly are confronted with worldwide competition. They have responded to this challenge with strategies of globalization. As a result, not only the leading companies now operate on a global basis with subsidiaries in all important regions even in central and south-east European countries. The pressure to globalize is also felt by many focused small and medium sized enterprises that are suppliers of components or specialized services to the giant multinational companies. Globalization, which characterizes the economic world, led to the necessity of understanding and comparison of the financial information of different corporations and also to present the fair view of businesses.

After some communist countries joined the European Union an important number of local companies became to apply accounting regulation according with International Financial Reporting Standards (IFRS). Ex-communist countries accounting developed remarkably in the last fifteen years, as shown by the flow of accounting literature in this field at national and international level. This development is mainly the result of preparations for EU accession by increased needs for attracting foreign investments, of achieving international comparative analyses, of expressing rules for determining results, of providing minimal accounting information to players on European and international capital markets, as well as of harmonizing and subsequently converging national, European and global accounting standards. In this way the accounting rules from each ex-communist country evolve in time in order to respond the social, cultural and economical environment needs (Ineovan, Hategan, Megan and Schmidt 2001: 8).

Globalization strategies are not restricted to operating and investing activities but increasingly also involve financing. Foreign listings (excepting companies from ex-communist countries) are not new to US multinationals or many of the large European companies being traded at home as well as on other major European and Asian stock exchanges (such as London, Frankfurt, Paris, Tokyo). New in recent years is that an increasing number of European companies are applying for listing on US stock exchanges notwithstanding the fact that complying with Securities and Exchange Commission (SEC) requirements puts quite a burden on them.

Accounting information plays a crucial role in those processes. For globalizing companies accounting reports are a vital means of internal communication between managers and employees from different national backgrounds. The correct application of accounting policies regarding the subsidies is required mainly by the existence of a manual of accounting procedures and policies within each entity (Hategan, Imbrescu, Pavel 2010: 344). Even though the core concepts of accounting are not very different internationally, we observe differences in rules and differences in the application of those rules that hamper internal communication. This problem traditionally was overcome by internal accounting guidelines that were mainly based on the national accounting rules of the parent companies. In view of adhering to the European Union, many east-European ex-communist countries understood the necessity to line-up with accounting standards in the Union and increased its efforts for adapting to these requirements. A great weight in the decision for reforming the east-European accounting national systems in that past period was represented by the necessity to take certain measures for helping these countries and its economies to develop and integrate themselves among the E.U. countries. Thus, at national level it has been perceived that the accounting harmonization process: will create the premises for attracting direct foreign investments, will reduce costs for these companies looking for financing on international capital markets for preparation of accounting information, will create a benefic frame for development of capital market in our country, will reduce commercial barriers and those related to international monetary cash-flows.

Risks of using professional judgment in ex-communist countries

Various researchers have examined the professional judgment and the issue of management motivation towards creative accounting behavior for East-European companies. We identified several motivations including the existence of tax levies based on income, confidence by shareholders and workers in management that is able to report stable earnings and psychological expectations relating to increases or decreases in anticipated income.

Tax is mentioned as a significant motivator also by many authors (Niskanen and Keloharju 2000: 443-452). In countries with highly conservative accounting systems as ex-communist countries the 'income smoothing' effect was particularly pronounced because of the high level of provisions that accumulate. Another bias that sometimes arises is called 'big bath' accounting, where a

company making a bad loss seeks to maximize the reported loss in that year so that future years will appear better.

Healy examines managers' earnings manipulations motives where executive compensation is linked to income measurement. Other authors discuss about managers' motivations to reduce the perception of variability in underlying economic earnings of the firm (Trueman and Titman 1988:127-139).

Kamin and Ronen observe a difference in motivation between managers in owner-controlled and management-controlled firms. Owners who wish to retain control of a sizeable stake and who are therefore not interested in immediate exit strategies are less likely to be motivated to manage earnings.

Other motivations for creative accounting discussed by some authors include those provided when significant capital market transactions are anticipated, and when there is a gap between the actual performance of the firm and analysts' expectations. A variant on income smoothing is to manipulate profit to tie in to forecasts. Fox reports on how accounting policies in some companies from ex-communist countries are designed, within the normal accounting rules, to match reported earnings to profit forecasts. When these companies sell products a large part of the profit is deferred to future years to cover potential upgrade and customer support costs. This perfectly respectable, and highly conservative, accounting policy means that future earnings are easy to predict. Company directors may keep an income-boosting accounting policy change in hand to distract attention from unwelcome news. Collingwood reports on how a change in accounting method boosted a company's quarterly profit figure, by a happy coincidence distracting attention from the company slipping back from being the largest company in the industry in the USA to the number two slot.

Creative accounting may help maintain or boost the share price both by reducing the apparent levels of borrowing, so making the company appear subject to less risk, and by creating the appearance of a good profit trend. This helps the company to raise capital from new share issues, offer their own shares in takeover bids, and resist takeover by other companies. If the directors engage in insider dealing in their company's shares they can use creative accounting to delay the release of information for the market, thereby enhancing their opportunity to benefit from inside knowledge. It should be noted that, in an efficient market, analysts will not be fooled by cosmetic accounting charges. Indeed, the alert analyst will see income-boosting accounting changes as a possible indicator of weakness.

Another set of reasons for creative accounting, which applies to all companies, arises because companies are subject to various forms of contractual rights, obligations and constraints based on the amounts reported in the accounts.

To discover and confirm the hypothesis regarding the implications of creative accounting on ex-communist countries companies, at the beginning of the year 2010 we performed a survey in an ex-communist country (Romania) on a non-representative sociological sample of 70 Romanian companies, which applied accounting standards in compliance with IFRS.

Based on this survey we received answers from the heads of financial-accounting departments regarding a series of questions about Romania applying the IFRS.

The main questions regards the application of professional judgment in a creative way by Romanian companies. By these questions we tried to question financial controllers from Romanian companies about their experience in applying professional judgment in a creative way and they were able to conclude that a significant proportion of all categories of companies employ creative accounting techniques to some extent. We examined some particular aspect or technique of creative accounting. All tend towards the conclusion that creative accounting using that particular technique does exist. Based on our survey, we registered the following results:

Q1. Do you think the accounting regulations according IFRS allow you to apply creative accounting for tax purposes?

61,4% thinks that the new accounting regulations allow to apply creative accounting for tax purpose; 10,0% didn't recognize the creative accounting concept and 28,6% are irresolute regarding that subject.

Q2. Which are the main reasons for applying creative accounting?

38,6 % think that the main reason is taxation, 24,3 % think that the reason is access to bank funds, 22,9 % think that the main reason is the interest of managers, 8,6 % think that the main reason is the interest of stakeholders, 5,7 % think that the main reason is the better presentation for exchange market.

Q3. Which are the techniques of creative accounting?

The surveyors answers were: exploitation of professional judgment (40%), IFRS flexibility (25,7%), manipulation of balance sheet amounts (11,4%), artificial transactions (10%), lack of detailed accounting regulations (7,1%), reclassification of debts (5,7%). The potential for creative accounting in Romania and for sure also in other ex-communist countries is found in few principal areas: regulatory flexibility, a lack of regulation, exploitation of professional judgment, the timing of some transactions, the use of artificial transactions and finally the reclassification and presentation of financial numbers.

According Largay, Mulford and Comiskey even in a highly regulated accounting environment such as the E.U., a great deal of flexibility is available.

Romanian accounting practice accounting regulation often permits a choice of policy; for example, in respect of asset valuation (IFRS and EU Directives permit a choice between carrying non-current assets at either revalued amounts or depreciated historical cost). Business entities may, quite validly, change their accounting policies. But in practice such changes may be relatively easy to identify in the year of change, but are much less readily discernible thereafter.

Other areas are simply not fully regulated. For example, there are very few mandatory requirements in respect of accounting for stock options. In the majority of countries, accounting regulation in some areas is limited: for example the recognition and measurement of pension liabilities and certain aspects of accounting for financial instruments.

Other problem is the character discretionary and nondiscretionary elements of the bad debts provision. For that the accountants must apply professional judgment and the relativity may introduce some manipulations of result for the period.

On the other hand our research found a sort of managers acknowledged manipulative behaviors and short-term orientations for their mandate for companies where the managers are not stakeholders.

The company's' artificial transactions can be entered into both to manipulate balance sheet amounts and to move profits between accounting periods. This is achieved by entering into two or more related transactions with an obliging third party, normally a bank. For example, supposing an arrangement is made to sell an asset to a bank then lease that asset back for the rest of its useful life. The sale price under such a 'sale and leaseback' can be pitched above or below the current value of the asset, because the difference can be compensated for by increased or reduced rentals.

Reclassification in balance sheet and presentation of financial numbers are relatively under-explored in the literature. The firms may engage in balance sheet manipulation to reclassify liabilities in order to smooth reported liquidity and leverage ratios. A special type of creative accounting relates to the presentation of financial numbers, based on cognitive reference points. As explained by Niskanen and Keloharju "the idea behind this behaviour is that humans may perceive a profit of, say, 301 million as abnormally larger than a profit of 298 million". Their

study has indicated that some minor massaging of figures does take place in order to reach significant reference points.

As we can see from our empirically research even though manager's motivation for creative accounting may be established and accepted in practice. Respected financial professionals, demonstrate that it's a lot harder to manipulate cash-flows, but the interest of management can be very strong in that manners to "make-up" other face for their company (Megan, Schmidt, Cotlet 2010: 512).

All of the creative accounting behaviors identified in this study was identified through careful analysis of the answers of financial controllers and of financial statements. Some of the manifestations were easier to identify than others, but all should be observable by a reasonably well informed user of the financial statements.

Conclusions

In Romanian accounting practice as in other ex-communist countries there are some unusual features of environment that merit special attention. The audit report qualifications are common, even in respect of major listed companies. The majority of qualifications in Romanian companies are oriented on fix assets valuation and to accrued expenses to avoid local taxes or decreases of profit for managers' bonus. In these conditions we ask: if the creative accounting behavior is so obvious, can it properly be classified as creative accounting at all? However, the extent to which users of the statements actually do observe such relatively clear examples of creative accounting is uncertain. It has been observed that analysts' reports in Romania usually fail to mention the existence of audit report qualifications, special authorizations from CNVM (National Securities Commission) or other manifestations of creative accounting practices.

Regardless of creative accounting techniques we can suggest some recommendations to combat creative accounting.

Romanian accounting regulators who wish to limit the opportunities in which creative accounting can be used could consider the possibility of approaching separately the diverse situations that allow the application of creative accounting:

The first step towards the reduction of possibilities to use creative accounting is to be made by the Romanian regulators (Finance Minister or National Securities Commission) and consists in the continuous development of a conceptual framework in the line of professional work. In this way, the objectives of financial information will be clarified and priorities clearly established. In these new conditions the orientations to design accounting rules have a double function, firstly they affect accounting standards-setters but they also establish general criteria which are useful to professionals in that they allow a more profound understanding of accounting legislation, which facilitates the analysis of complex cases and lays the foundations of a professional opinion about accounting practices.

The second step: in the field of election of an accounting method over another creative accounting could be reduced by reducing the allowed accounting criteria or clearly specifying the circumstance in which a method should be applied. It can also help to require uniformity in the use of accounting methods. Today, in Romania the accounting criteria can be changed if it is explained in the Annual accounts' report and the impact of this change is quantified in the result of the company. If the change of criteria is forbidden, when a company chooses criteria, because with it achieves the image that is needed for that financial year, the same criteria will have to be used in future circumstances.

The third step: limitation of financial managers potential abuse using their own opinion could be moderated by using two methods. The first method consists in designing accounting norms which minimize the use of subjective opinions. For example, accountants in the United Kingdom tended to use the extraordinary section in the profit and loss account to include accounts avoiding its

inclusion in the ordinary profit. The Accounting Standards Board (ASB) in the United Kingdom responded by abolishing the category of extraordinary accounts.

The second method is that auditors must intensify their role in the identification of bad estimations. When completing auditing reports, these professionals must evaluate if there have been accounting manipulations of the annual accounts. In this area, it is worth mentioning the existing debate around the responsibilities assigned to the auditing function. Audit expectations gap, is the concept used to describe the difference between what is expected from auditors and what is actually established in current legislation. We sustain the opinion that the auditing function should include the evaluation of internal control systems of the company to identify in a preventive manner the cases of creative accounting, or in extreme cases of fraud which can be extremely dangerous for company, for their financial statements users and for the society.

Many managers argue the artificial transactions by invoking the concept of "substance over form", by which is the economic substance and not the legal form of the transaction what determines the accounting substance.

As we have seen in accounting literature creative accounting is perceived as a characteristic of the Anglo-Saxon approach to accounting, very flexible and with scope for different opinions, much more than the continental European model, which traditionally is more rigid and with detailed accounting norms. In any case both approaches have potential for the reduction of the possibilities to control creative accounting. The continental European model facilitates the reduction of the possibilities to abuse the election of an accounting policy and the manipulation of accounting estimates. The Anglo-Saxon model drives towards the use of 'substance over form' and revaluations.

By applying IFRS and EU Directives the Romanian accounting is in the last years much more closer to Anglo-Saxon approach and the risks of bad presentation of financial information by financial statements is higher and the difference between financial accounting and tax accounting become to be deep.

For this reasons Romanian accountants have to accustom with ethical behavior and CECCAR (The Body of Expert and Licensed Accountants of Romania) make big efforts to develop this concept in our profession. On the other hands the Romanian regulator have to anticipate and action to reduce the techniques of creative accounting. In the last years with the assistance of professional auditors Romanian accounting tend to became more correct and true fair-view oriented. Without this features Romania will lose at the level of credibility with direct effects on foreign invests or country image.

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THE BUDGET, ITS THEORETICAL FUNCTION AND IMPLEMENTATION IN THE PUBLIC CULTURAL SYSTEM

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This article covers the budget's functions, providing a double reading, both theoretical and practical, as it intends to perform a theoretical synthesis of the ways in which the budget is used and implemented in the case of a public cultural institution. The article is intended to answer the following research question: which are the ways of using the existing budget that may exist within a public cultural institution? The source of this research is the authors' interest for the control of the organizations in the cultural field, which has led to the formulation of the following practical questions: which are the proper instruments for the control of such organizations? And mostly, which are and which could be the budget's functions – a central controlling instrument?

We have focused our attention on a case of exhibition organizing public institution, the type of organization which crystallizes in an exemplarily manner the particularities of cultural organizations as well as any control decelerators which may occur.

At a first stage of our research, we have made two interviews with the Museum's financial manager in charge of the exhibition organization. The first interview was based on a grid regarding the administration system in general and the administration instruments privileged within the organization. In the light of this interview and of the research literature for the control of this type of organization, we have focused our attention on the issue of the budgets' role. The second interview focused mainly on budgets. At a second stage of our research, the analysis of internal documents allowed us to identify better the elaboration of a cultural organization's budgets and to discover the similarities and singularities as compared to the budgets of the companies outside the cultural sector.

In a paradoxical manner, the article ends with the advantage of using an instrument based on a „rigid” framework and coded within the cultural organizations analyzed, while having a creative and progressive trend.

Key words: *budget, control, cultural institution, administration instruments, budget's functions*

Jel codes: *M41*

Introduction

This article covers the budget's functions, providing a double reading, both theoretical and practical, as it intends to perform a theoretical synthesis of the ways the budget is used and implemented in the case of an exhibition organizing public institution, provided that such institutions have particular specific budget functions. Likewise, the theoretical framework for the analysis of previously raised issues seems to be that of controlling the cultural organizations, stressing their strong institutional dimension, certain particularities which have a translation in terms of control.

Similarly, we have expected the budget's administrative and legal dimension to occur expressively in the field study. We have focused our attention on a case of exhibition organizing public institution, the type of organization which crystallizes in an exemplarily manner the

particularities of cultural organizations as well as any control decelerators which may occur. During our study, we have paradoxically found that the budget's administrative and legal dimension was much behind, as compared to other functions of the budget, which were close to those applicable in private companies. This finding lead to a rethinking of the theoretical framework, able to act as support of this study: consequently, the budget's functions are indicated without being expressly limited to a type of organization. Moreover, should the administrative budget issue be evoked, it shall be based mainly on the synthesis of the budget's theoretical functions in private companies.

Consequently, the theoretical framework of research, described in the first part of the article, provides a synthesis of the ways to use the budgetary instrument.

This theoretical framework is used, in the second part of the article, as support for the study of an exhibition organizing public institution, which allows the blending of theory and practice.

The functions of the theoretical budget adapted to the public cultural organizations?

The theoretical framework acting as support of the field study is based on a synthesis of the functions which the budget may fulfill within an organization. The problem of their adaptation to public cultural organizations is raised.

According to its initial resource monitoring and controlling function, the administration control deals with efficiency and efficacy issues, both for the means used as well as for the results obtained. (Anthony 1965: 79). For this purpose, as it is based on a resource allocating mechanism, assumed as related to the institution's strategy, and, as it allows to reach the objectives, the budget may seem like one of the central control instruments. The administration control related specialized literature refers to a very large scale of the budget's use. Actually, beyond the resource provision and allocation function which constitutes the basis of the budgetary approach, the budget fulfills various functions, related to specific contexts and institutional mechanisms. The specialized literature identifies four large types of use of the budget, existing in public or private organizations. These are provided in table 1 below and shall act as analysis framework for the development of our research which consists in the budget's ways of use in public cultural institutions, in general, and in exhibition organizing organizations, in particular.

Table no. 1: Various functions of the budgetary system

Allocation functions - resource allocation, achievement control and provision function	Administrative functions - the function of resource allocation and distribution in budgetary lines
Cohesive and social functions - coordination, communication and motivation function - interactive and learning function	Political functions - the internal or external function of action motivation and negotiation support

Some of the budget's ways of use may provide a rather "technical" or "mechanical" reading corresponding to the allocation and administrative functions. Others may have a more "behavioral" nature corresponding to social and cohesive functions, on the one hand, and to political functions, on the other hand.

Allocation and administrative functions

Allocation functions and administrative functions are considered successively. The allocation functions have been mostly studied in the context of private companies. Therefore, the budget has been long time described within these organizations as a resource allocation, provision and

diagnosis mechanism (Bouquin 2001; Gervais 1997 ; Hofstede 1977 ; Simons 1990, 1995). Simons (1995:59) describes budgetary systems as being the “formal informing systems which the managers use to monitor organizational results and to correct the differences from the provided performance standards”. It consists in continuing to have a strictly technical use of budgets, by comparing the data provided to the achievements.

Likewise, another function assigned to the budget, except that this time it pertains to the public sector, is the budget’s administrative and legal function. It has constituted the main object of the studies performed in museums. Chatelain (1998) mostly analyzes the possibility of eliminating the budget’s too administrative and legal character generated by the state’s attributive sequence, in order to use the budget as a real administration instrument. He also observes that artistic and cultural organizations tend to overcome the structure’s rigidity, by proposing budgets per functions and services. Besides these functions pertaining to the technical field, the budget has more behavioral dimensions.

Cohesive, social and political functions

One may distinguish cohesive and social functions, on the one hand, and political functions, on the other hand. Numerous researches in the field of administration control, in general, and of budgets, in particular, have considered the cohesive and social aspect of the budgetary systems. More precisely, these studies have focused on the budget proposed as a motivation and participation instrument (Hofstede 1977), a communication and coordination instrument (Bollecker 2002), a cohesion and social practice instrument (Busco, Riccaboni & Scapens 2006 ; Villesèque-Dubus 2007), or a learning or interactive practice instrument (Abernethy & Brownell 1999, Hugues & Nahapiet 1980; Simons 1995).

At the end of these theoretical functions of the budget, an issue is raised regarding the adaptation of some of these functions mentioned in the researches made in the private sector companies, in the case of public cultural organizations. Some of the particularities of these organizations, irrespective of their legal statute, may constitute control theoretical obstacles and may be less compatible to extended uses of the budget as an administration instrument.

An adaptation in the case of public cultural organizations

The study of the budgetary functions within public cultural institutions should first be seen in the general context of the cultural organizations’ control. Due to their cultural purpose, these organizations may actually have some inherent difficulties regarding the management within the public and non-profit sector, in general, and its control, in particular. We shall now see that, among cultural organizations, the exhibition organizing organizations seem to be favorable to a control study, especially regarding the budgets’ issue.

Control and cultural organizations

The existence of cultural objectives makes it possible that the mission of a cultural organization is never restricted to generate a profit. The situation of cultural organizations has common points with that of the assembly of organizations in the public and non-profit sector, which has consequences from the point of view of control. Here are several examples as illustration. Therefore, the definition and measuring of performance (Demeestère, 2002, Drucker, 1990) are problematic within these organizations. Another example is that of cost calculation which is problematic in the public field, especially due to the difficult valorization of resource consumption and to the multitude of potential interpretations of the production notion (Burlaud & Simon, 2000). Likewise, it is equally difficult to define and measure the production of non-profit organizations (Le Duff & Papillon, 1997). Yet, there are various researches which imply that, despite their cultural specificity, they are “administered” and, most of all, controllable (Agid &

Tarondeau, 2006; Amans, 2003 ; Bonnafous-Boucher, Chatelain-Ponroy, Evrard & Mazallon, 2003 ; Chatelain, 1996; Evrard & Chiapello, 2004 ; Gombault, 2000, 2003; Tobelem, 2005).

Budget and exhibition organization

Due to their own creation activity, which is not equally advanced in all the cultural organizations, they are directly confronted to the potential contradiction between control and art. And there is also the possibility of observing an interesting tension between their creative dimension and the rigid and coded framework of budgets. In this respect, we have stated in the introduction that the exhibition organizing public institutions crystallize in an exemplarily manner the cultural organizations as well as any control decelerators which may occur. Therefore this type of institution seems quite adapted to a control study, especially on the budgets' issue. Consequently, the following statements identify some of the issues raised by the control of these institutions which involves a strong component: "artistic creation". An important issue in the field of control is that of provision: how to provide the resources required for the production whose result is not always known and on which basis is it possible to create a norm, knowing that the creation idea is based on the hypothesis that the norm is not preset (Chiapello 1997)? To what extent could there be a voluntary increase of tasks in order to obtain more subventions?

Another point refers to Baumol's law (Baumol & Bowen 1966) and the explanation proposed for the rise of production costs in public cultural organizations. This law, although contestable from several points of view, is used by interested organizations to justify the rise of the budgets required (Farchy & Sagot-Duvaurox 1994).

All these questions and issues lead us to the exploration of the control system of an exhibition organizing institution, and especially to the focusing on the budget's way of use.

The functions declared in a museum

An experimental study has been performed in a public institution, a museum, subordinated to the Ministry of Culture. The purpose of this study was to observe the control system of this institution and, more precisely, to check on the way of using a control system.

The study of the "Museum" organization

First of all we shall brief both the company's characteristics, hereinafter referred to as the "Museum", and the research protocol. Further on, we shall introduce and analyze the control system, by means of the projects implemented in this organization.

Case overview, characteristics and experimental approach

The organization studied is a public institution, a museum, subordinated to the Ministry of Culture. Its purpose is to develop cultural democracy, contributing thus to the access of all types of exhibitions and cultural events. Our study focuses on the main activity of this organization, which is the appraisal of the exhibitions. Exhibitions generally make the object of a single display. At a first stage of our research, we have made two interviews with the Museum's financial manager in charge of the exhibition organization.

The first interview was based on a grid regarding the administration system in general and the administration instruments privileged within the organization. In the light of this interview and of the research literature for the control of this type of organization, we have focused our attention on the issue of the budgets' role. The second interview focused mainly on budgets.

At a second stage of our research, the analysis of internal documents allowed us to identify better the elaboration of a cultural organization's budgets and to discover the similarities and singularities as compared to the budgets of the companies outside the cultural sector.

Among these documents there are the budgets of “exhibition expenses”. The budgets of “exhibition expenses” summarize, for each exhibition, the rental costs for location and equipment, the technical personnel, the exhibition’s insurance, promotion and marketing. Firstly, these documents have been analyzed from the point of view of their conception and then, for their use. They have equally served as support for a third interview with the institution’s manager, which has allowed the development of various aspects. Finally, the third stage, based on the analysis of documents and interviews, has consisted in the interpretation of our initial question which has been, from an experimental perspective, the description of the budgets’ functions and mechanisms in cultural organizations.

A project controlled and indicator based organization

The administration of the analyzed company, through its public character, is very much based on the implementation of the so called primitive budgets. These budgets are generally established in the beginning of a calendar year and approved by the main credit release authority. They may be adjusted during the period provided that there are changes at the same period. The exhibition budget is established by the person responsible with its elaboration within the institution, responsible both for the programming administration as well as for the administration control, with the participation of the entire personnel. Its elaboration starts with the establishment of the budgets individually prepared for each type of exhibition and continues with the aggregation of all the established budgets.

This control way per product or service could be assimilated to an administration control per project, where each exhibition relates to a different project. In this respect, it relates to the control methods which are more transversal and functionalist and it exceeds the fundamentals of the administrative budget.

Due to its public institution statute, to its functioning method through voted budgets and to the allocation of public resources, the Museum seems more of a mechanistic nature, rather than organic or adhocratic, according to Burns and Stalker (1961) or Mintzberg (1982). Nevertheless, the latter have stressed the interest of using organic or adhocratic structures within the contexts dominated by the strong need of creativity. In this respect, Chiapello (1997) states that they may correspond to cultural organizations.

Moreover, although using a rather formalized system, the company is based on a scoreboard which only includes a few indicators. Among these indicators, there is the cashing from tickets’ sale (at sale points) and especially from the hall occupation, the main indicator.

The budget, an instrument of exhibition organization

In culture, and especially in the public sector, the budget has a special role. Indeed, the study performed in the “Museum” institution proves that the budget fulfills all the previously underlined functions (table 1), but with different degrees of importance. For example, surprisingly, the budget’s administrative role reappears in this organization when traditional relative functions of the provision and diagnosis are highlighted. In addition, the budget’s social and cohesive dimensions seem to be present as much as the political dimension which is very important in this organization.

Allocation and administrative functions

While we can expect a very administrative and legal use of the budgetary instrument in the analyzed organization, this research results in a clear exceeding of the budget’s administrative version (and of the primitive budgets’ overview), as compared with the diversified ways of using the budget. In the so called classical ways of implementing the budgetary systems, it is normal to consider three main stages: the completion, the guiding and the post-assessment (Bouquin, 2001).

In the analyzed organization, the completion is essential and exerts a double role. It also has a strategic role to the extent to which it is the departure point of the annual programming, therefore of the products. Thus, on the occasion of this completion stage of the budget, the company's programming strategy is veritably defined: the selection of exhibitions, the selection of the hall display. Afterwards, this completion stage allows the establishment of the estimations which serve as basis for the finance request and which shall allow the achievement of the respective products. In this way, it exceeds the resource allocation mechanisms as it is an occasion of thinking the strategy and debating its subject. The estimations are established and voted in two stages: the vote of the primitive budget first goes through a budgetary orientation debate regarding the strategy and secondly, the budget is validated by the main credit release authority. The guiding stage is daily administered by the financial manager of the exhibition who makes sure that there is no exceeding of the chapters.

The post-assessment stage, i.e. the diagnosis stage, is mainly subjected to a double control, that of the administration board and that of the credit release authority which is the main subsidizer of the organism. A third control is added, which is performed upstream by the financial manager of the exhibition.

The modifications occurred at the time which affect the budget are therefore voted again, thus generating a budgetary review. In this respect, the budget exceeds its administrative character in order to become an administration instrument (Chatelain, 1998b).

Cohesive, social and political functions

In the investigated case, the budget equally fulfills a learning and organizational integration function. Yet, they seem to remain on a secondary plan regarding a function which has a function with a more political character highlighted in the interviews performed. First of all, regarding the specific learning aspects or the budget's integrative aspect, the latter's conception involves the sharing of the estimations based on discussion and consultation. In this case, learning occurs by implementing corrective actions from one period to another, but differentiated by the possibility of disposing of the supplementary budget. It is based more on the effects of the experience and socializing, generating the control informal systems. (Bollecker 2002). Moreover, the interactions observed are beyond the organization's framework for financial partners. Actually, the budget provides support for communication regarding public subsidizers: all the subventions are budgeted and the budget is submitted to the subsidizing organisms. Consequently, the budget helps to communicate and prove the necessity of programming related financing. The budget therefore exceeds its "technical" framework in order to legitimate the action taken and to fulfill more political functions (Covaleski & Dirsmith 1986). Eventually, the interaction between the budget and the environment appears as one of the main functions of the instrument, which may be explained through the institutional framework: the budget's dimensions regarding the external image presented, the budgetary information serving essentially as an external political plea (Covaleski & Dirsmith 1983).

Conclusions

This organization includes the budget's functions mentioned in the specialized literature. Nevertheless, some of these functions seem to be more developed than others. Therefore, if the budget's administrative and legal function seems to be withdrawn, the resource allocation, the achievement provision and control functions are explicitly presented. This last function makes sure that there is no "sideslip" and that the budget is complied with. One of the main limits of the instrument within the estimation's dimension relates to the difficulty of providing accurate estimations in the area of artistic creation. In addition, monitoring allows the limitation of budgetary exceeding, but it does not authorize multiple or frequent revisions, to the extent to

which the state makes fixed commitments. In this respect, the budget as an allocation, estimation and achievement control instrument may include a part which lacks flexibility, even if the possibility of making a revision is considered. Similarly, if the cohesive and social functions are not fully exerted, political functions are yet important: in front of external partners, the budget appears as a legitimating and negotiating instrument. Finally, the budget's rigid character is exceeded by the organization: it allows a better negotiation and, paradoxically, the earning of a financial margin. This research has allowed the highlighting of the budget related functions in the exhibition organizing institutions and, for this purpose, it has contributed to the enrichment of the theoretical framework of the control of cultural institutions and of the budget. The generalization of the results of this study would be premature as they are generated by a unique study, intended to focus, through the interview, on the financial manager of the exhibition. The budgets' replacement would be necessary in the control system of these organizations, raising thus the issue of their place as compared to the other control instruments, such as the scoreboard. Eventually, besides the issue of the creative activities' control, it would be interesting to add a question regarding the generalization of the studies' results in the framework of the organizations situated beyond the artistic and cultural sector.

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AUDITOR ROTATION – A CRITICAL AND COMPARATIVE ANALYSIS

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The present paper starts out from the challenge regarding auditor tenure launched in 2010 by the Green Paper of the European Commission “Audit Policy: Lessons from the Crisis”. According to this document, the European Commission speaks both in favor of the mandatory rotation of the audit firm, and in favor of the mandatory rotation of audit partners. Rotation is considered a solution to mitigate threats to independence generated by familiarity, intimidation and self-interest in the context of a long-term audit-client relationship. At international level, there are several studies on auditor rotation, both empirical (e.g. Lu and Sivaramakrishnan, 2009, Li, 2010, Kaplan and Mauldin, 2008, Jackson et al., 2008) and normative in nature (e.g. Marten et al., 2007, Müller, 2006 and Gelter, 2004). The objective of the present paper is to perform a critical and comparative analysis of the regulations on internal and external rotation in force at international level, in the European Union and in the United States of America. Moreover, arguments both in favor and against mandatory rotation are brought into discussion. With regard to the research design, the paper has a normative approach. The main findings are first of all that by comparison, all regulatory authorities require internal rotation at least in the case of public interest entities, while the external rotation is not in the focus of the regulators. In general, the most strict and detailed requirements are those issued by the Securities and Exchange Commission from the United States of America. Second of all, in favor of mandatory rotation speaks the fact that the auditor becomes less resilient in case of divergence of opinions between him and company management, less stimulated to follow his own interest, and more scrupulous in conducting the audit. However, mandatory rotation may also have negative consequences, thus the debate on the opportunity of this regulatory measure remains open-ended.

Keywords: independence, financial audit, familiarity, rotation

JEL Classification: M40

1. Introduction

The Green Paper of the European Commission issued on the 13th of October 2010 “Audit Policy: Lessons from the Crisis” launches a number of 38 questions, among which one regarding the long-term audit-client relationship: „From the viewpoint of enhancing the structure of audit markets, do you agree to mandatory rotation and tendering after a fixed period? What should be the length of such a period?” The European Commission speaks both in favor of mandatory firm rotation, and in favor of the mandatory rotation of audit partners, for the benefit of objectivity and dynamism on the audit market. Starting from this issue re-launched by the European Commission, authors considered appropriate the critical and comparative analysis of the normative framework on auditor rotation at European, international and North-American level. The paper is structured as follows: first of all, the most relevant previous studies on auditor rotation are analyzed; second of all, the research design is explained; third of all, the relevant regulations to be found at European, international, and North-American level are presented, while in the last section of the paper, authors analyze critically and by comparison the identified regulations and present arguments against and in favor of mandatory auditor rotation.

2. Literature review

Numerous studies on auditor rotation have been recently carried out. For instance, Lu and Sivaramakrishnan (2009) investigate the effects of mandatory audit firm rotation on companies' investment decision and auditor choice in a capital market setting. Li (2010) tests the association between auditor tenure and conservatism and concludes that tenure imposes threat to auditor independence especially in smaller firms or firms weakly monitored by their auditors. Kaplan and Mauldin (2008) examine by experiments the impact of audit firm versus partner rotation on non-professional investors' independence-related perceptions. Their main conclusion is that by comparison with audit partner rotation, audit firm rotation does not strengthen independence in appearance among non-professional investors. Another study recently performed in Australia by Jackson et al. (2008) reaches the same conclusion, namely that mandatory firm rotation is not to be desired, because it does not enhance independence and audit quality. These studies are empirical in nature, but other researchers chose a normative approach, such as Marten et al. (2007), Müller (2006) and Gelter (2004), who investigate auditor independence regulated at international, European and North-American level, inclusively aspects regarding the auditor rotation.

3. Research design

The present paper has a normative research approach. The normative endeavor requires the analysis, explanation, and improvement of existing norms, as well as the development of new norms (Ionaşcu, I., 2007). The contribution to knowledge brought by this type of endeavor is validated by the acceptance of the interested parties (in case of auditing, the Chamber of Financial Auditors of Romania, audit companies, other accounting professionals, public interest entities, national and private companies, academic environment etc.). In the spirit of the normative approach, authors perform a comparative analysis of the regulation existing at European, international and US level with regard to auditor rotation. The relevant regulations are identified and their divergent and common points are analyzed. Moreover, the initiative of the regulator to introduce rotation is justified from the perspective of the role rotation plays in safeguarding auditor independence.

4. Normative framework regarding the internal and external auditor rotation

4.1. EU Regulations

Article 42 (2) of the Directive 43/2006 require the Member States to ensure that the statutory auditor or the key audit partner(s) responsible for carrying out a statutory audit rotate(s) from the audit engagement within a maximum period of seven years from the date of appointment. Their participating again in the audit of the entity is allowed after a period of at least two years. In the particular case of the auditors of public interest entities, the Directive requires internal mandatory rotation, namely the rotation of the key partner(s) that audit(s) such entities. Member States shall allow the audit firm to continue to be the statutory auditor of that entity, on the condition they impose the change of the key audit partner(s) who is/are associated with that firm.

Initially, the proposal for amending the Directives 78/660/CEE and 83/349/CEE published in 2004 set a rotation interval of maximum five years for the key audit partner responsible for carrying out the statutory audit. Moreover, it was proposed that the statutory auditor or the key audit partner responsible for carrying out the statutory audit on behalf of the audit firm is bound from taking up a key management position in the audited entity before a period of at least two years has elapsed since he resigned from the audit engagement.

The Recommendation of the Commission from May 2002 specifies internal rotation as safeguard to reduce independence risk if the collaboration of the key personnel with the client company is

long enough to create familiarity or trust. It is even stated that in order to mitigate familiarity or trust threats to independence, the rotation of the engagement partner or other key audit partners of the engagement team within a reasonable period of time cannot be replaced by other safeguards. However, the European Commission admits that in certain situations, the internal rotation of the engagement partner and of other key partners is not possible, due to the size of the audit firm. This is the case of a sole practitioner's practice or of an audit office where the daily relationship between a limited number of Audit Partners is too close. In such situations, other safeguards are to be implemented within a reasonable period of time. If no appropriate safeguards can be identified, the statutory auditor should consider whether he/she should continue the audit engagement.

At the level of the European Union, the mandatory internal rotation alone is stipulated as safeguard to ensure independence. However, the Directive 43/2006 mentions in case of auditing public interest entities the possibility that a Member State requires the change of the audit firm also, if that state considers it appropriate for achieving the set objectives. Therefore, if the client company is a public interest entity, the solution of the external rotation is alternatively regulated. Recently, the Green Paper of the European Commission issued on the 13th of October 2010 "Audit Policy: Lessons from the Crisis" states that the periodical rotation of key audit partners in accordance with the 8th Directive does not suffice for completely eliminating familiarity threats. This is the reason why the European Commission suggests to consider the mandatory rotation of audit firms and not only the rotation of the audit partners. In order for this measure to really be efficient, it is considered necessary that regulations on rotation, if adopted, to clearly stipulate the compulsoriness of rotating both firms and partners. Such regulations would thus prevent partners changing audit firms only to "take along" certain clients.

4.2. International Regulations

The IFAC Code of Ethics (IFAC – International Federation of Accountants) does not comprise regulations regarding the external rotation of the audit firm, but mentions only the internal rotation as safeguard in relation to the threats posed to independence by self-interest and familiarity. In the general case, the rotation of the senior personnel of the engagement team is a possible solution to reduce the risk of such threats (paragraph. 290.150, 2010). In the particular case of public interest entities, the key audit partner should be replaced after seven years the latest. Only after a period of two years, in which the individual shall not be a member of the engagement team or be a key audit partner, that person can be again involved in the audit process of that entity (paragraph. 290.151, 2010).

The IFAC Code of Ethics also mentions situations that do not allow following these periods. For instance, it is permitted for key audit partners to continue to be part of the engagement team, if their involvement is particularly important to audit quality and if unforeseen circumstances outside the firm's control take place, which prevent internal rotation. In such a situation, it is necessary that the threat to independence is or reduced to an acceptable level by applying appropriate safeguards (paragraph 290.152, 2010).

Another situation regulated by the IFAC Code of Ethics in paragraph 290.154 is when an audit client becomes a public interest entity at a certain point during the collaboration with the auditor. In this circumstance, when determining the timing of the rotation, one should consider the length of time the key audit partner has been involved in auditing that entity. If when the client becomes a public interest entity, that individual was a key audit partner for five years or less, he may continue to serve the client in that capacity for seven years less the period of time already served. If that person served as key audit partner for six or more years, he/she may serve as audit partner for a maximum of two additional years before being replaced.

It may also happen that internal rotation of key audit partners is not an achievable independence safeguard due to the limited number of persons within the audit firm who have the necessary knowledge and experience to serve as a key audit partner. In such a case, paragraph 290.155 of the IFAC Code of Ethics stipulates that if an independent regulator in the relevant jurisdiction has provided an exemption from partner rotation in such circumstances, it is allowed that an individual remains a key audit partner for more than seven years, provided that the independent regulator has specified alternative safeguards (such as an independent external review).

4.3. US Regulations

In the United States of America, mandatory external rotation was in the focus of US regulatory authorities, as shown by the study of the General Accounting Office carried out in 2003 and required by Section 207 of the Sarbanes-Oxley Act (SOA) for analyzing the costs and benefits of such a legislative measure. However, there are detailed regulations only with regard to internal auditor rotation.

The Code of Professional Conduct of the American Institute of Certified Public Accountants (AICPA) mentions in paragraph ET §100-1.26 (r) as example of safeguards implemented by the firm the rotation of senior personnel who are part of the attest engagement team. Section 203 SOA, subsection (j) is more specific, since it regulates the mandatory internal rotation after five years. A firm is not allowed to provide audit services to an issuer if the lead (or coordinating) audit partner (having primary responsibility for the audit), or the audit partner responsible for reviewing the audit, has performed audit services for that entity in each of the 5 previous fiscal years of that entity.

The regulations of the Securities and Exchange Commission (SEC) on partner rotation (namely CFR § 210.2-01 section (6)) are quite detailed. Any audit partner who performs the services of a lead partner or concurring partner for more than five consecutive years is not considered to be independent. A period of maximum seven consecutive years is foreseen by SEC for (1) providing more than ten hours of audit, review, or attest services in connection with the annual or interim consolidated financial statements of the issuer; (2) serving as the lead partner or concurring partner in connection with any audit or review related to the annual or interim financial statements of a subsidiary of the issuer whose assets or revenues constitute 20% or more of the assets or revenues of the issuer's respective consolidated assets or revenues. CFR § 210.2-01 also establishes a cooling-off period of five consecutive years, over which that partner is not allowed to serve as lead partner or concurring partner or a combination of these. For the other services which can be carried out for a maximum period of seven consecutive years, the cooling-off period is of only two years.

An exemption from these rules regarding internal rotation is stipulated for audit firms with less than five clients that are issuers and less than ten partners, on the condition that PCAOB (Public Company Accounting Oversight Board) conducts a review at least once every three years of each of the audit client engagements that would result in a lack of auditor independence because of the prolonged period of collaboration of the auditor with a certain client.

5. Critical and comparative analysis

By comparison, the regulation authorities at all levels (international, European and North-American) require the internal rotation at least in the case of public interest entities, while the external rotation is not to be found in the center of the attention of the regulators. The most strict and detailed requirements are those issued by SEC. They stipulate the rotation of the lead partner and concurring partner after a period of five consecutive years, while being prevented for other five years to serve that client. According to the regulations at European level, the partner can be responsible for the statutory audit at a certain client for at least seven years from the appointment

date, period after which their participation in auditing the entity after a time frame of two years is allowed. In this respect, the European regulations are identical with those available at international level. Another common point between the European and the international regulations is represented by the fact that both normative frameworks consider the possibility that the requirement of the internal rotation cannot be followed due to the size of the audit firm.

The purpose of the regulations on internal, namely external auditor rotation reside in the wish of the regulator to protect auditor independence from the familiarity threat. Familiarity and trust in the client-company are caused by a long-term relationship between the financial auditor and the audited entity. Such a relationship over several years leads to a relationship of trust between the two parties. Therefore, it is possible that because of familiarity, auditor independence is threatened, because his/her objectivity is compromised, and he/she is not able anymore to identify some relevant aspects for the audit opinion which would normally come out.

Other independence risks in this context are those generated by self-interest and intimidation. Financial auditors can be considered economic agents, whose decisions are driven by their own interests. If reporting an error is correlated with the decrease of the turnover, their availability to report that error decreases. Moreover, if an audit contract is not prolonged the auditor loses future economic advantages (quasi-rents according to DeAngelo, 1981). The client can exert pressure over the auditor by threatening he will not prolong the audit contract and thus auditor independence can be compromised. External rotation is an independence safeguard for these threats posed by self-interest and intimidation. If external rotation were mandatory, according to Marten et al. (2007), the auditor will be much less capable of facing eventual pressures from the client, and not prolonging the contract will have reduced economic consequences.

On the other hand, one can argue that a long-term relationship between the financial auditor and the audited company is beneficial, because the auditor, due to a thorough knowledge of that company and its activity, can perform a more efficient and more valuable audit. Moreover, the literature on the topic (see Müller, 2006) considers the efficiency of a first audit engagement is more reduced than the efficiency of subsequent audits. Moreover, the costs of the subsequent engagements are lower than the cost of the first engagement, because auditor's efforts of adapting and familiarizing with the processes and activities of the audited firm already have been made. Table 1 briefly presents the arguments for and against the compulsoriness of auditor rotation in accordance with the ideas of Marten et al. (2007) from the perspective of the influences it has on audit quality, understood by DeAngelo (1981) as the ability of the auditor to detect errors.

Table 2: Arguments for and against the compulsoriness of auditor rotation

Arguments for	Arguments against
A long term relationship increases the risk that the auditor anticipates the results of the previous financial statements instead of identifying new changes in the audited firm.	The experience, the knowledge and the deep understanding of the structures of the audited company are lost.
The increased trust of the financial auditor in running the company makes him/her perform fewer audit procedures or to perform them less strict.	Since the new auditor must adapt to and get familiar with the client-company, there is the risk that in the first years of the engagement, he/she ignores some errors, because he/she does not know the client well enough.
If the auditor is convinced by the management's integrity, he/she will ignore errors, will overlook them or will	In the first audit engagements, the auditor is more dependent on the information provided by the client and it

underestimate them.

In case of tenure, there is the risk that the auditor identifies with the problems of the management and does not act with professional skepticism anymore.

By changing the auditor, there is more room for innovations in selecting and applying audit methods, while trust in management limits creativity.

Audit procedures are more difficult to be foreseen by the client.

Aware by the fact that his/her activity might be checked by future auditors, the auditor will work more conscientiously.

Mandatory rotation increases competition on the audit market, because more audit engagements are available, which has a positive effect on audit quality.

is more difficult to him/her to check their correctness.

Rotation prevents the development of audit plans over several years.

Because not all areas can be intensively audited, there are some aspects which are not audited within the first engagements.

Auditors are less motivated to invest in resources specific to the client and its economic branch, because rotation reduces the economic life of such assets.

Through rotation, the auditor is less motivated to invest in economy and efficiency (for instance in persons and in technological innovations).

The competitiveness incentives are lower, especially because efficient auditors do not receive the maximum possible profit from their engagements, since rotation temporally limits the demand for their audit services.

Made by the authors, in accordance with Marten et al. (2007)

6. Conclusions

Following the research performed, we can conclude that all the regulatory authorities, both the international and the European and North-American ones presented rotation as a solution to the threats generated by a long-term relationship between the financial auditor and the client company. Essential is the distinction between the internal rotation (of the persons involved in the audit and active in the mandated audit firm) and external rotation (of the audit firm). The internal rotation is stipulated by all the regulatory frameworks presented, while the external rotation, although over the years it was of interest for the legislators, is not regulated. The strictest regulations on internal rotation are those of the North-American space, which are also the most detailed ones. The European and international regulations overlap to a great extent.

Despite of the state of facts regarding the regulations, auditor rotation is still a debated topic. The critical analysis performed in this paper presented some of the arguments in favor of this solution, but also some of its possible undesired negative effects it may have. Thus, the mandatory rotation makes the auditor less resilient in case of divergent opinions between him and company management, less stimulated to follow his own interest, and more scrupulous in performing audit works, knowing his work will be controlled by the following auditor. On the other hand, by setting mandatory rotation, the knowledge and experience gathered over numerous audit engagements can be less capitalized, while the motivation to invest in resources that are specific to the client and its industry, and the incentives for competitiveness are lower. Thus, the debate on the opportunity of the rotation remains open-ended.

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EVIDENCE FROM THE GERMAN CAPITAL MARKET REGARDING THE VALUE RELEVANCE OF CONSOLIDATED VERSUS PARENT COMPANY FINANCIAL STATEMENTS

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Financial statements' main objective is to give information on the financial position, performance and changes in financial position of the reporting entity, which is useful to investors and other users in making economic decisions. In order to be useful, financial information needs to be relevant to the decision-making process of users in general, and investors in particular. Hence, the following question arises logically – which of the two sets best serves the information needs of investors (and other categories of users), respectively which of the two sets is more relevant for investors? Of course, the possibility of both sets at the same time best serving the information needs should not be ruled out. In our scientific endeavor we conducted an empirical association study on the problem of market value relevance of consolidated financial statements and of individual financial statements of the parent company, searching for an answer to the above question. In this sense, we analyze the absolute and relative market value relevance of consolidated accounting information of listed companies on the Frankfurt Stock Exchange (one of the largest three stock markets in the European Union) between 2003 and 2008. Through this empirical study we intend to contribute to the relatively limited literature on this topic with a comparative time analysis of the absolute and incremental relevance of financial information supplied by the two categories of financial statements (group and individual). The results obtained indicate a statistically significant superiority of the relevance of consolidated statements (in detriment of individual ones). However, we could not statistically prove a superior value relevance of information provided together by consolidated and parent company financial statements as opposed to consolidated information. On the one hand, these results prove the importance (usefulness) of consolidated financial statements especially for investors on the capital market, and on the other hand, they question the necessity of publishing parent company financial statements.

Keywords: Consolidated Financial Statements, Parent Company Financial Statements, German Capital Market, Market Value Relevance

JEL Classification: M40, M41

I. Introduction

Financial statements' main objective is to give information on the financial position, performance and changes in financial position of the reporting entity, which is useful to a wide range of users in making economic decisions. In order to be useful, financial information must be relevant to the decision-making process of users in general, and investors in particular, meaning that it must have the capacity to influence their economic decisions. In fact, relevance constitutes one of the main characteristics of financial information quality (Francis et al. 2004: 968). Moreover, in the exposure draft regarding the improvement of the Conceptual framework, IASB and FASB named relevance and faithful representation as the two fundamental qualitative characteristics of financial information (QC2). Therefore, in order to make assessments on the quality of information of financial statements, it is absolutely necessary to quantify this relevance (capacity to influence) of financial information.

An appropriate environment to perform such a measurement is the capital market, where investors' decisions (as users of financial information) are reflected directly in the share price of the reporting entity. In this context, market value relevance is measured by the ability of financial information to capture or summarize information that influences share prices (Francis and Schipper 1999: 325). According to the same authors market value relevance means the existence of a statistical correlation/association between financial information and prices or returns, and also the fact that this information explains market prices to an extensive measure, starting from the presumption of the efficient market in which prices reflect the available information (Francis & Schipper 1999: 326).

Financial information is supplied mainly through financial statements of entities (listed on the capital market). As most listed companies (on the large European stock markets) own one or more subsidiaries, they are obligated (by accounting legislation and stock exchange regulations) to prepare consolidated financial statements for the group they own, besides their individual financial statements. Thus, parent companies are obligated to a dual reporting materialized in two sets of financial statements – one at individual level, the other at group level. Therefore, the following question arises naturally – which of the two sets best serves the information needs of investors, respectively which of the two sets is more value relevant. Of course, the possibility of both sets at the same time best serving the information needs is not ruled out.

Considering all these aspects, we set to carry out an empirical association study on the problem of market value relevance of consolidated financial statements and of individual financial statements of the parent company, searching for an answer to the above question. In this sense, we pursued an analysis of absolute and relative market value relevance of consolidated and parent company accounting information of listed entities between 2003-2008 on the Frankfurt Stock Exchange (one of the largest stock markets in Europe).

II. Literature Review

Concerning the empirical research that has approached this matter, there are only a few studies which could be identified in the international literature. In general, they bring evidence in favor of the superior relevance of consolidated financial statements (Harris et al. 1994, Niskanen et al. 1998, Abad et al. 2000) respectively evidence for the lack of relevance increment of individual financial statements of the parent company (Niskanen et al. 1998, Goncharov et al. 2009).

In their study, Harris et al. (1994) compare the value relevance of accounting measures for U.S. and German firms matched on industry and firm size. One of their conclusions based on their empirical findings states that the explanatory power of accounting data is increasing in the level of consolidation and that unconsolidated data perform poorly relative to the consolidated data. Niskanen et al. (1998) examine the information content of consolidated versus parent-only earnings, using accounting and market data from Finnish firms. Their results show that consolidated earnings are a significant incremental explanatory variable for stock returns, while parent-only earnings are not, thus indicating that consolidation improves the information content of earnings, and that the requirement to disclose parent-only earnings should be based on arguments other than their value-relevance to shareholders.

Abad et al. (2000) investigate the value relevance of consolidated versus parent company accounting information on a sample of Spanish firms listed on the Madrid Stock Exchange. The authors use the Edwards-Bell-Ohlson valuation framework to generate the results. The empirical findings show that, from this valuation perspective, consolidated information dominated parent company (non-consolidated) information. Finally, Goncharov et al. (2009) examine the possibly different economic functions of company and group accounts using a large number of accounting and market-based metrics from a sample of German companies. Their analysis indicates higher

value relevance, predictive ability, and timeliness of group accounts as compared to company accounts. Furthermore, they could not identify an incremental usefulness of single accounts.

III. Research Methodology

In this empirical research we followed the analysis of market value relevance of consolidated and unconsolidated accounting information on companies on the Frankfurt Stock Exchange for the period 2003-2008. The main criterion for the selection of companies is the belonging to the extended version of the main index (DAX 30), which is the HDAX 110. This index includes companies from the DAX, MDAX and TecDAX. We excluded financial and insurance companies from the sample because their structure and accounting practices differ significantly from those of non-financial companies (Hellström, 2006: 335). As well, to eliminate composition differences of the sample from one year to the other (which would affect comparability of results in time), we excluded companies that have not been listed on the stock exchange for the whole analyzed period. At the same time, to increase the homogeneity of the sample and to use the same time span (31.03 – 30.04) to determine average share price, companies with closing dates different from 31.12 were excluded. Therefore, after going through these steps, the final sample is made up of 35 companies, respectively 210 firm-year observations.

Consolidated and individual financial information (group equity, parent company equity, group earnings, parent company earnings, number of shares) was collected manually from the annual reports for the 210 year-observations of the complete sample, after being previously downloaded from the official web-sites of the respective companies. Share prices for the sampled observations were also collected manually from the finance.yahoo.com database. For the development of the study, we computed average closing share prices for 31.03 – 30.04 of each year, thus neutralizing possible daily fluctuations of the prices, caused by factors that are not linked to the financial information published in the annual reports.

For the purpose of this study, we formulated the following two hypotheses concerning the relevance of consolidated and parent company financial statements:

Hypothesis 1: Information supplied by consolidated financial statements are more value relevant than information supplied by individual financial statements of the parent company.

Hypothesis 2: Information supplied together by consolidated financial statements and parent company statements are more value relevant as opposite to information supplied only by consolidated financial statements.

In order to empirically test the research hypotheses on the market value relevance of information supplied by consolidated and parent company financial statements, we developed four econometric valuation models which measure the degree of association between share price and accounting information supplied by financial statements (equity and net income). The basis for this models is the Ohlson (1995) valuation model, which expresses share price as a function of current accounting value of equity plus discounted value of future (abnormal) results. To compare relevance in absolute values of information supplied by consolidated financial statements, respectively by parent company financial statements, the following empirical models were elaborated:

$$\text{Model 1: } Pit = a0 + a1 * pBVit + a2 * pEit + \varepsilon it \quad (1)$$

$$\text{Model 2: } Pit = a0 + a1 * cBVit + a2 * cEit + \varepsilon it \quad (2)$$

Where

Pit	=	share price of company i in year t
pBVit	=	book value of parent company equity/share of company i in year t
pEit	=	parent company net income/share of company i in year t
cBVit	=	book value of group equity/share of company i in year t

$$cE_{it} = \text{group earnings/share of company } i \text{ in year } t$$

In order to make inferences regarding incremental utility of information supplied by consolidated financial statements we developed a model to include both categories of information:

$$\text{Model 3: } Pit = a_0 + a_1 * pBV_{it} + a_2 * \Delta cBV_{it} + a_3 * pE_{it} + a_4 * \Delta cE_{it} + \varepsilon_{it} \quad (3)$$

Where

ΔcBV_{it} = difference between group equity and parent company equity/share of company *i* in year *t*

ΔcE_{it} = difference between group earnings and parent company earnings/share of company *i* in year *t*

A fourth empirical model was developed to verify the second hypothesis, regarding the market value relevance superiority of information supplied (together) by consolidated and parent company financial statements as opposed to consolidated information. This is based on model 2 and also includes information supplied by parent company financial statements:

$$\text{Model 4: } Pit = a_0 + a_1 * cBV_{it} + a_2 * \Delta pBV_{it} + a_3 * cE_{it} + a_4 * \Delta pE_{it} + \varepsilon_{it} \quad (4)$$

Where

ΔpBV_{it} = difference between parent company equity and group equity/share of company *i* in year *t*

ΔpE_{it} = difference between parent company earnings and group earnings/share of company *i* in year *t*

We statistically measured the explanation power of these models quantified by adjusted R². As a general rule, the greater the explanation power, the higher the value relevance for the accounting information associated to the particular empirical model.

IV. Results

In order to test the hypothesis regarding the superior value relevance of consolidated financial statements (as opposed to parent company financial statements), we firstly compared the absolute value relevance of information supplied by the two types of financial statements, based on two regression models (Table no. 1 and Table no. 2). By comparing the explanatory power (Adj. R²) of the two models for the whole analyzed period (2004-2008), the superiority of the value relevance of information provided by consolidated financial statements clearly stands out. Concerning the coefficients of the two regressions, they are significant (and positive) at 0,001 level. At the same time, the estimated coefficients have values of variance inflation factor (VIF) under 5, indicating the fact that there are no worrying aspect regarding the effects of multicollinearity between explanatory variables of the model.

Table no. 1: Empirical results for model 1

Sample		Characteristics			MODEL 1	
		α_0	pBV	pE	F	Adj. R ²
Frankfurt n= 192	Alfa	22.105	0.772	3.784	26.758	22.50%
	t	6.561****	3.841****	4.554****		
	VIF	-	1.13	1.13		

Made by the author

Table no. 2: Empirical results for model 2

Sample		Characteristics MODEL 2				
		$\alpha 0$	pBV	pE	F	Adj. R ²
Frankfurt n= 192	Alfa	18.682	0.34	4.282	93.017	50.30%
	t	8.262****	3.252****	7.459****		
	VIF	-	1.873	1.873		

Made by the author

In the second stage we considered testing the relevance difference between group financial statements and parent company financial statements (that is incremental Δ Adj. R²) to see if it is statistically significant. Therefore, based on models 1 and 3 (Table no. 3) we checked the level of statistical significance of changing the explanatory power of model 1 after introducing supplementary variables corresponding to consolidated information from model 3, and concluded that the relevance surplus is statistically significant at 0,001 level (Table no. 4). Consequently, the first hypothesis regarding the superiority in terms of relevance of consolidated financial statements is statistically confirmed.

Table no. 3: Empirical results for model 3

Sample		Characteristics MODEL 3						
		$\alpha 0$	pBV	Δ cBV	pE	Δ cE	F	Adj R ²
Frankfurt n= 192	Alfa	17.465	0.355	0.408	5.012	3.523	46.899	50.90%
	t	6.418****	2.137**	3.335****	6.485****	6.491****		
	VIF	-	1.22	1.496	1.543	1.581		

Made by the author

Table no. 4: Comparison between explanatory power of model 1 and model 3

Adj. R ²	Model 1 PFS	22.50%
Adj. R ²	Model 3 CFS*	50.90%
Δ Adj. R ²	(M3-M1)	28.40%
Sig.		0.000

Made by the author

To continue, we tested regression model 4, developed to verify the hypothesis regarding the superiority for the capital market of information provided (together) by consolidated financial statements and parent company statements as opposed to consolidated information (Table no.5).

Table no. 5: Empirical results for model 4

Sample		Characteristics MODEL 4						
		$\alpha 0$	cBV	Δ pBV	cE	Δ pE	F	Adj. R ²
Frankfurt n= 192	Alfa	17.099	0.356	0.76	5.347	1.287	48.063	50.80%
	t	6.411****	2.207**	0.382	6.844****	1.931*		
	VIF	-	4.504	3.97	3.508	2.342		

This is based on model 2 (consolidated information) and also includes information offered by parent company financial statements. The comparison between the explanatory power of the two models (Table no. 6) reveals a superiority of model 4 (based on dual information) of 0,5% for the whole sample. However, this difference is not statistically significant at least at 0,1 level. This result does not allow, in our opinion, a confirmation of the second hypothesis regarding the superior relevance of dual reporting as opposed to consolidated financial reporting.

Table no. 6: Comparison between explanatory power of model 2 and model 4

Adj. R2	Model 2 SFC	50.30%
Adj. R2	Model 4 Dual	50.80%
Δ Adj. R2	(M4-M2)	0.50%
Sig.		0.133

Made by the author

V. Conclusions

In this study we investigated using econometric regression models the absolute and relative market value relevance of consolidated financial statements for companies listed during 2003-2008 on the Frankfurt Stock Exchange. For this purpose we focused on the „confrontation” regarding the value relevance between consolidated and parent company financial statements. As expected (and in accord with previous empirical studies, for example Harris et al. 1994, Niskanen et al. 1998, Abad et al. 2000, Goncharov et al. 2009), the results have shown a statistically significant superiority of the relevance of consolidated statements (in detriment of individual ones). Moreover, we could not prove from a statistical point of view a superior value relevance of information provided (together) by consolidated and parent company financial statements as opposed to consolidated information. These results prove, of course, the importance (usefulness) of consolidated financial statements especially for investors on the capital market. They also question the necessity of publishing parent company financial statements (according to national regulations) as long as they present consolidated financial statements. As a matter of fact, in the USA the obligation to publish parent company financial statements was eliminated since 1982. We consider that these conclusions are valid not only for large European capital markets, but also for emerging capital markets (such as the one in Hungary, Romania, Bulgaria).

In the end, some aspects regarding the limitations of this study should be mentioned, as well as the perspectives of future empirical research. First, it is possible to raise the problem of sample representativeness (and implicitly of the results obtained) for the German capital markets. In this respect, future research could extend the analysis (and the sample) to other capital markets in Europe, as well as to companies that are not included in the main index of the stock market they are listed on. Second, the obtained results are based only on testing linear price level regression models. Future research could employ nonlinear models, for example logarithmic models (see Hellström, 2006) respectively return regression models (see Bartov et al. 2005). And third, the present study investigates relevance and therefore usefulness for decision making of consolidated financial statements only from the point of view of the investors on capital market. So, a future research theme less approached until now (see Goncharov et al. 2009) would be to investigate the relevance of financial statements from the perspective of other categories of users (for example financial institutions in their role as creditors).

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HOW TO BETTER MEET OUR STUDENTS' LEARNING STYLE THROUGH THE COURSE RESOURCES

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Publishers of the course resources for business higher education are willing to help professors and instructors to develop the learning process. An important part of the learning process is affected by the each student's learning style. Our paper focuses on how meeting students' learning styles can be done through the course resources we use. The scope of the paper is to identify a way to link students' learning preferences with the available course resources. The literature on this topic is limited, the interest in research being focused less on resources used and their useful diversity. We heavily relied in our research on the preliminary results of a market research study conducted by the Higher Education Group from Harvard Business Publishing among instructors who use resources from Harvard Business School's library. The research methodology is based on the case study method. We tried to recommend a treatment to our students and then analyze the effect of the applied treatment. The main instruments used are the VARK test followed by tailored recommendations for each student. The first conclusion of the research is that identifying the learning styles is extremely useful for students in terms of learning process. Knowing and exploiting their particular learning style helped students to maximize their learning. The second conclusion is that recommending resources based on learning styles is useful because it really helps students to learn in their own styles. The results of our paper show, firstly, that learning process could be facilitated by professors' directly identifying students' learning styles. Secondly, our findings underline the importance of having a diversity of resources available for our students, and to be able to offer them a constructive solution regarding their learning styles. Moreover, our contributions are reflected in the methodology we used in linking the learning styles with the course resources and in building our personal approach in issuing our students individual recommendations on study strategy based upon their learning styles.

Key words: learning process, learning styles, VARK test, course resources, identify students' learning styles

JEL classification: M49

1. Introduction

Teaching is defined as building a bridge from the subject taught to the student learning (Engel, cited by Gardner and Jewler, 2006: 64). Based on this idea, the bridge is the teaching process, which includes both a learning process and knowledge transposed via textbooks, articles, case studies, videos, and other media.

One of the crucial elements of the learning process is the learning style which may be defined as the tendency to adopt a particular strategy in learning. (Pask, et al., 1977). The term "learning styles" refers to the concept that individuals differ in regard to what mode of instruction or study is most effective for them. (Pashler *et al.*, 2009: 105)

Learning styles are characterized as cognitive, affective, and psychological behaviors that indicate how learners perceive, interact with, and respond to the learning environment (NASSP, 1979). The physiological dimension views learning as it relates to biological characteristics of an

individual; for instance, what senses (auditory, visual or kinesthetic) are used in learning (Drago and Wagner, 2004: 2). The learning style has its roots in the human representational systems, which comprises the basic five senses: visual, auditory, touch, taste and smell. Individuals have a preference for one of these systems, and communication to these people can be improved by relating it to their unique models of the world (Fatt, 2000, 34). Some cognitive styles and dispositions do seem to influence how and what students learn...some individuals seem to learn better when information is presented through words (verbal learners), whereas others seem to learn better when it's presented through pictures (visual learners). (Omrod, cited by Pashler *et al.* 2008:106). A short description of these learning styles is given below (extras from Fleming and Mills, 1992, p.140-141):

- *The visuals (V)* prefer to learn from maps, spider diagrams, charts, graphs, flow charts, labeled diagrams, and all the symbolic arrows, circles, hierarchies and other devices, that instructors use to represent what could have been presented in words.

- *The aural (A)* perceptual mode describes a preference for information that is "heard or spoken." Students with this modality report that they learn best from lectures, tutorials, tapes, group discussion, email, using mobile phones, speaking, web chat and talking things through. It includes talking out loud as well as talking to oneself.

- The preference for *read and write (R/W)* is for information displayed as words. Many academics have a strong preference for this modality. This preference emphasizes text-based input and output - reading and writing in all its forms. People who prefer this modality are often addicted to PowerPoint, the Internet, lists, and words, words, words.

- *The kinesthetic (K)* modality refers to the "perceptual preference related to the use of experience and practice (simulated or real)." Although such an experience may invoke other modalities, the key is that people who prefer this mode are connected to reality, "either through concrete personal experiences, examples, practice or simulation".

Since the learners could have different representational systems, they will prefer different resources to learn. As a consequence, the students' learning styles determine the resources they can best use in the learning process.

Literature is not much concerned regarding the topic of the resources used within the classroom in business schools. In 2010, the Higher Education Group from Harvard Business Publishing ran a market research project among instructors which use resources from Harvard Business School's library. The Group invited instructors to submit the syllabi they use in their courses in order to understand the future needs in teaching and curriculum development. The preliminary results were shared among the instructors who responded the Group's request and they are not available to the public. Since we submitted our Accounting for Managers' syllabus, we received the preliminary results of the research.

The final database includes 771 course syllabi submitted by 601 faculties from 457 universities. Participating regions were: Western Europe (14 countries), Australasia (11), Central/South America (11), Africa/Middle East (7), Eastern Europe (2) and North America (3). By tenure, 33% are full professors, 28% adjuncts, 22% assistant professors, and 17% associate professors. By educational level, 52% are MBA syllabi, 28% are undergrad syllabi, 9% Executive Education, and 11% other. By discipline, the largest are: Marketing (23%), Technology & Operations Management (17%), Finance (12%), and Organizational Behavior (11%).

An analysis of the resources used in the learning process reveals that from the total analyzed syllabi an average* of:

- 43% represents book chapters (of which 49% are assigned at the undergraduate level and 39% at the master level)
- 32% cases (of which 32% are assigned at the undergraduate level and 33% at the master level)

- an average of 24% articles (of which 17% are assigned at the undergraduate level and 27% at the master level)
- 2% media (equally distributed among the undergraduate and graduate levels)
- *percentage totals do not sum to 100 due to rounding, and to the exclusion of the “Executive Education” and “Other” categories.

Moreover, the research results reveal how many syllabi assign at least one mandatory reading or homework from the following product types or learning resources:

- 74% to book chapters at the undergraduate level and 77% to book chapters at the graduate level
- 92% to cases at the undergraduate level and 97% to cases at the graduate level
- 54% to articles at the undergraduate level and 73% to articles at the graduate level
- 23% to multimedia resources (same percentage both at undergraduate and graduate levels)

The preliminary results indicate to us that a lot of resource types, from textbooks, articles, and case studies to videos and more are used in courses. Good questions can rise from here: What type of resources should students use? Do they have enough physical time to investigate all the resources available? Or maybe some of the resources are redundant and therefore a lot of time might be wasted in reading the same things expressed in different words.

The scope of this paper is to identify a way to link students’ learning preferences with the available course resources. Moreover, we want to emphasize the necessity of building or providing different types of resources based on students’ varying learning preferences.

2. Methodology

VARK is a questionnaire that provides users with a profile of their learning preferences (Fleming and Mills, 1992, p.140-141). The acronym stands for visual, aural, read (and write) and kinesthetic which represent the physiological dimension of the learning style.

We tried to use VARK questionnaire in order to link the students’ learning style with the course resources. The steps of our methodology are:

I. Applying VARK questionnaire

We applied VARK questionnaire to two online MBA classes in an American University, in the Accounting for Managers course. A total of 34 students were investigated from different areas of US and with different backgrounds.

The VARK test was introduced as a mandatory assignment called *“The VARK Questionnaire - How Do I Learn Best?”* in the first week of each course, graded with 2% of the final grade.

Students were informed that the scope of the VARK is to determine what type of learner they are and then they can choose the learning methods that fit their learning style. They were asked to take the test at <http://www.vark-learn.com/english/page.asp?p=questionnaire> for free.

The VARK test employed by us was recommended as a good one by the literature: (see also the work of Drago and Wagner, 2004) and also by the American Accounting Association (AAA) members in one of the debates during the Annual Meeting in San Francisco, USA, in 2010.

Once the students got their scores, they were asked to submit them in order to receive from us individual recommendations on how to study more efficiently than they did previously.

II. Tailor individual recommendations for each student based on the resources we had.

The resources recommended to be used in the course were a textbook, PowerPoint presentations, narrative slides, video presentations, quizzes (standard and enhanced), and case studies. Some of the resources like PowerPoint presentations, narrative slides, video presentations, and quizzes

(standard and enhanced) were available online for free, and the rest of them: textbook and cases studies had to be purchased by students.

The content of the course was structured based on the textbook's chapters and for each chapter a case study was assigned as a mandatory assignment, besides problems and exercises.

Generally speaking, for each week students were asked to read one or two chapters, do the problems and exercises assigned and then solve the case study assigned. The syllabus was designed to guide students in how to learn efficiently. Thus, recommendations on how to read the textbook, how to solve the problems and exercises, and how to deal with the case studies were given in the syllabus.

In order to maximize the outcome of the learning process, and to make it more efficient, we recommended students to use only those resources that fit better their learning styles. Moreover, we gave them detailed instructions on how to use the resources indicated.

For example, we present here the recommendations we gave students with a certain approach for learning:

We recommended those who feel comfortable with the *read/write learning strategy*, to learn Accounting for Managers using the following steps, in this order:

1. *“Read the chapter and take a notebook in which to write main ideas, concepts, or to draw a chart.*
2. *Analyze the case study. I would recommend you to take a sheet of paper and a pen and write down the important ideas and useful data. After you have fully understood the case, open an Excel file to solve it.*
3. *Do the problems assigned (if any). You can use the same strategy I recommended for case studies.*
4. *Then, take the quizzes. I recommend you to check the book/notes before answering the questions, which will help you to consolidate your knowledge”.*

Students with a preference for *visual learning* received recommendations as follows:

1. *“Start your learning by reading the chapter first: read, underline the sentences you consider important, make notes on the book (not separately in a copybook), and look at graphs, charts and tables. You need to “photograph” all the information available and so you will feel more comfortable doing this.*
2. *Watch the PowerPoint presentation for each chapter*
3. *Take the quizzes. I recommend you to check the book before answering the questions, which will help you to consolidate your knowledge.*
4. *After this, it is time to do the problems assigned (if any) and to analyze the case study. Write down (using a pen or an Excel file) the given information and then start to solve the problem”.*

For students with *aural preference* for learning we recommended the following:

1. *“Start learning by listening to the Narrative slides (you can find them on the Web Links area). They will help you to get familiar with the main objectives of the chapter and introduce you very well in the topic.*
2. *Read the book chapter to receive more details regarding the topic.*
3. *Listen the video presentation (you can find them on the Web Links area)*
4. *Do the problems assigned (if any) and analyze the case study.*
5. *Do the quizzes.”*

For the *kinesthetic learners* we recommended:

1. *“Read the chapter and take a notebook in which to write main ideas, concepts, or to draw a chart.*
2. *Analyze the case study. I would recommend you to take a sheet of paper and a pen and write down the important idea and useful data. After you fully understood the case open an Excel file to solve it.*

3. Do the problems assigned (if any). You can use the same strategy I recommended for case studies.

4. Then, take the quizzes. I recommend you to check the book/notes before answering the questions, which will help you to consolidate your knowledge.”

But students with a single learning preference are only few of the total number of students. For those who have more than one learning preferences, called multimodal learners, we combined our recommendations written above for individual learners.

III. Evaluate the results

At the end of the course we asked students to give us their feedback regarding the recommendations based on their learning style identified with the VARK test. Our message to them was:

“I would really appreciate if you can give me your feedback regarding the VARK test. I am interested to know if you did you use my recommendations. And if so, were they helpful? If not, please indicate to me the reason(s). More, I would like to know your perception about learning based on these recommendations.

If your feedback is positive I will continue to give these instructions to my future students. But if you consider that those recommendations didn't help you much, please let me know what the reasons are. I really don't want to bore my future students with something useless.”

Feedback was not graded and no points or other benefits were given to students as a compensation for their feedback.

3. Results

The structure of students per learning styles is presented below:

Learning styles	V	A	R/W	K	Percentage in total	Total
One learning style (OLS)	0	3	6	4		13
<i>percentage in OLS</i>	<i>0.00%</i>	<i>23.08%</i>	<i>46.15%</i>	<i>30.77%</i>		<i>100.00%</i>
<i>percentage in total no of students</i>	<i>0.00%</i>	<i>8.82%</i>	<i>17.65%</i>	<i>11.76%</i>	<i>38.24%</i>	
<i>(first preference)</i>						
Multimodal learning styles (MLS)	V	A	R/W	K	Percentage in total	Total
V (2nd preference)	0	0	1	3	19.05%	4
A (idem)	0	0	1	1	9.52%	2
R/W (idem)	1	3	0	5	42.86%	9
K (idem)	0	0	4	0	19.05%	4
<i>percentage in MLS</i>	<i>4.76%</i>	<i>14.29%</i>	<i>28.57%</i>	<i>42.86%</i>	<i>90.48%</i>	
more than 2 equal preferences				2	9.52%	2
<i>total MSL</i>					<i>100.00%</i>	<i>21</i>
<i>percentage in total no of students</i>	<i>2.94%</i>	<i>8.82%</i>	<i>17.65%</i>	<i>26.47%</i>	<i>55.88%</i>	
<i>more than 2 equal preferences</i>					<i>5.88%</i>	
<i>total no of students</i>					<i>100.00%</i>	<i>34</i>

Table 1. Structure of students per learning style

Out of the total number of students, 13 persons (38 %) have one predominant learning style. 23% of them have a preference for aural learning, 46% have the kinesthetic learning preference and

30% have the read and write (R/W) learning style. As we can see, a strong proportion of the students with one learning style has the read and write learning style.

Out of the total number of students, 19 persons (56%) have a multimodal learning preference. Most of them have the read and write component as a predominant learning style. The second dominant learning style was the kinesthetic component. As it is presented in the table above, 4 students have as first preference the R/W learning style combined with the kinesthetic component, 5 students have as first preference the kinesthetic learning style combined with a R/W approach, 3 students have the kinesthetic and visual learning approach, and only one student has the kinesthetic and aural preferences for learning.

Based on the individual learning styles, we issued recommendations for each student, as we presented in the methodology. We provided the recommendations in the first week of the course in order to help students to learn more efficiently. All the students took the VARK test and submitted their results via the e-learning platform.

At the end of the course, students were asked about their feedback related with VARK test. In this way, they were asked to answer the next main questions: did you use the recommendations? Were they helpful? Also, they were asked to write their perception regarding this test.

Out of the 34 students, 9 students didn't send their feedback (26% of the total no of students). Therefore, we got the feedback from 25 students.

Regarding the first question: did you use the recommendations? 23 students (92% of the respondents) answered affirmatively. Same percentage of the students found the recommendations helpful and contributing to their learning. Moreover, some of them wrote that they didn't hear about the existence of the learning styles so far. Their perception about learning based on VARK test's results varies from "the perception of my own self" to the "very useful".

Overall, their feedback strongly encouraged us to use the VARK test in the next classes.

We've presented further parts of the feedback received to emphasize the impact the test had on our students:

"I just wanted to Thank you for your feedback on the VARK score. This is the first time I have actually had this type of analysis done and appreciate your feedback greatly. After receiving your feedback, I actually implemented this into my regular study habits in medicine, along with accounting as well. I try to write separate notes in a notebook now and read them aloud to myself and it definitely has helped me improve my understanding of the concepts I am learning about. Just wanted to say thank you for this advice, as it has helped me not only in your course, but with others also." (Student with R/W and aural learning preferences)

"I feel the VARK test has shown me which areas I should focus on and what I already do when studying or reading. Furthermore, I do see the VARK test as an important part of this course, especially in the beginning. I have never had a test like this where it displays results regarding what kind of reading and studying suits your style. I found them to be very helpful, because I have never seen recommendations as such, and I have found myself doing more of the things the VARK test recommended. I fully recommend you use it for your next batch of students as it can have a lasting impact not only on this course, but future courses ahead. Thank you for a wonderful class and your help thus far!" (Student with kinesthetic learning preferences)

"Concerning the VARK test, You made some excellent suggestions to my learning style. This tool was very helpful to me because when I am studying, it gives me a technique to learn the most material and retain the material and also to understand concepts instead of just memorizing. I am also studying for USMLE and have used some of your recommendations and have been very

productive in my learning. I think this is great for students to use because it helps you to study smarter not harder.” (Student with R/W and visual learning preferences)

“I did find the VARK test interesting. At this point in my education experience, I have found some good techniques that help me to learn, and I think they follow the guidelines of what I learned from the VARK test, so I can't say I changed anything based on this. However, I did find it interesting and it was a nice intro to see that you actually cared about my learning.” (Student with kinesthetic learning preference)

“I liked the overall test, because the test gave me a perspective of my own self that I thought I would not realize on how I learn school/college/university work load materials. After reviewing the score in those categories, and after reading your suggestions or recommendation based on my score, some parts did help me, for example, I thought that I follow through by simple observation and then performing them along with practice, I eventually get better in performance. Little did I know, that I learn even better from just reading/writing along with some parts of your recommendation... The test is just ideal for your understanding, not an in-depth quality per say, on how your students learn their course material either in your class or others.” (Student with R/W and kinesthetic learning preferences)

4. Conclusions

The results of our research reveal the following two main conclusions:

The first conclusion is that identifying the learning styles is extremely useful for students in terms of learning process. Knowing and exploiting their particular learning style help students to maximize their learning. This conclusion can be depicted from the feedback received.

The second conclusion is that recommending resources based on learning styles is absolutely necessary because it really helps students to learn in their own styles. But this conclusion involves the existence of myriad resources, so they can be suitable for each possible learning style.

The results of our paper show, firstly, that the learning process can be facilitated by professors' direct efforts in identifying students' learning styles. Secondly, it underlines the importance of having a diversity of resources available for our students and to be able to offer them a constructive solution regarding their learning styles. Moreover, our contributions are reflected in the methodology we used in linking the learning styles with the course resources and in building our personal approach in issuing students' recommendations.

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CONCEPTUAL DELIMITATIONS OF CONTROLLING

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Since the practitioners of controlling in Romania only know the toolkit they use and not the theoretical elements as well, what is needed in this case is a conceptual delimitation so that controlling would be better implemented, and improved with various elements of the economic environment. In practice, inside various linguistic areas different problems of communication may occur very often in regards to the use of different concepts that may be misunderstood. Therefore in the Romanian research area it becomes imperative to try and clarify the existing issues and to intensify the research in this field. Studying the evolution of the concept we observe that the need for its implementation is primarily experienced at the practical level of the companies, to be then followed by a debate in the specialized literature. The internationalization and the fierce competition that the Romanian companies are confronting on the economic market represent the decisive factor in adopting the concept of controlling. This article is part of the research conducted for my doctoral thesis, "Controlling in heterogeneous economic environments", under the coordination and supervision of Prof.Dr.Dumitru Matiș

Keywords: Controlling, Management Accounting, Management Control, Accounting, Internal audit

JEL Code: M49

1. Controllingul - a new concept in the Romanian economic environment

„Controlling” represents a new concept in the Romanian economic environment, being implemented successfully in very few companies. Unlike the German space where controlling is very well represented both at a practical level and in the academia, in Romania controlling can only be found at a practical level, and the specialized literature is restraint, almost absent. As the study conducted by Christoph Binder/Utz Schäffer in 2004 showed, out of the 92 Faculties of Economic of the German area there were 72 controlling departments.

When attempting to identify in the specialized literature a basic and unitary definition of controlling one learns that such an endeavour remains fruitless (Roso, Vormweg și Wall 2005: 67-84). Peter Preißler claims that ”Everyone has its own opinions on what controlling means or should mean, but everyone else thinks to something different.” (Preißler 1997: 12)

To define the concept of controlling one needs to specify that it has its origins in the anglo-saxon word „to control”, that means *to order, to direct, to regulate, to supervise, to keep within limits, to lead in order to anticipate*, and not *to check*, being associated to the idea of coherence. This explains the polyvalency of the modern term *controlling*. The term has its roots in the English „counter-roll”, and the French „contre-rol”, that means to verify a current state based on a past state (nominal).

2. Controlling-ul – Science of administration

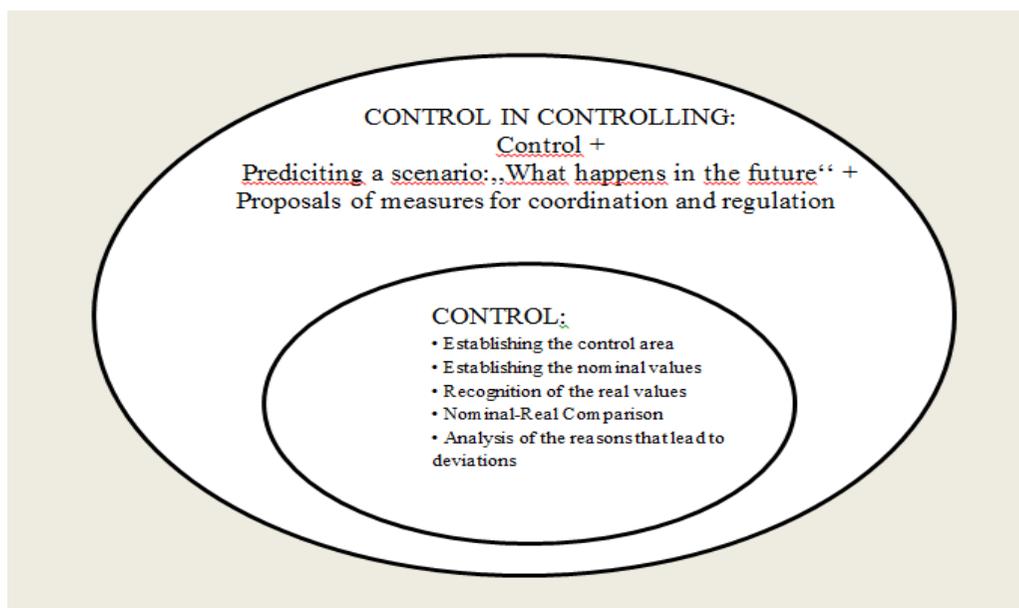
Since Controlling represents along with Accounting, Management and Human resources a „Management science” one has to make the distinction between *Management control* and *Controlling*. An expression that comes from the American environment emphasizes that Management is not administration and that the English „control” does not cover the content of the French „controle”. The cultural differences and similarities represent a decisive factor when

comparing the two concepts. According to AFNOR (Association Francaise de Normalisation) controlling is the verification of the conformity of initial data followed by a reasoning. The English controlling is done *before* the completion of the activity while the French one is done *after* the completion of the activity. According to the French accounting plan the Management Control represents the set of provisions taken in order to periodically provide the leaders and those responsible of the process the digital data that characterize the evolution of the company, thus offering the possibility to compare these data with the old ones and the ones to come and, if needed, to motivate the leaders to initiate the appropriate corrective measures (Braescu, 2007: 25-36). In Horvath's view controlling is conceived as a management subsystem that coordinates the planning and the control and also provides information to the management.

2.1. The control concept in controlling

In the Anglo-American space controlling has been highlighted as being „Management Control“, together with planning and coordination, and is conceived as representing a Management subsystem. „Management Control is the process by which managers influence other members of the organization to implement the organisation's strategies“ (Anthony și Govindarajan 1998: 6). If a Controller represents nowadays a supervisory or control body, the concept of controlling does not prioritize the control. Controlling is not control. The controller also controls, but a person that controls is not a controller. In Robert Anthony's vision the Controller is responsible for tracing and operating the system of the Management control.

Figure nr.1 Placing the concept control in controlling



Source: Eschenbach and Siller 2009: 37

Another conceptual delimitation of controlling ought to be made in regards to the internal audit that represents a verification of the activities completed in the past by persons that were directly or indirectly dependent on the area of responsibility. The internal audit can be accomplished by persons from inside or outside the economic entity and may have a regularly temporary character or not.

2.2. Controlling, Internal Audit and Accounting

Some of the most important differences between the internal audit and controlling are illustrated in the below table. Nota The internal audit and the controlling represent along with the supervisory bodies and the external audit the elements of the supervisory bodies. (Schneider 2000: 68).

Tabel nr.1 Delimitating controlling from the internal audit

Criteria	Internal audit	Controlling
The issuer	Supervisory Board, Leadership	Management at all levels
Scope	Selective based on issues	Selective based on necessity
Main goal	Control and supervise	Completing the management
Operating time	Ex-post	Ex-ante, ex-nunc
Regulations	Specific to the audit, based on the audit codex	Does not exist
Tasks	Protection of equity	Increase of equity

Source: Eschenbach and Siller 2009: 65

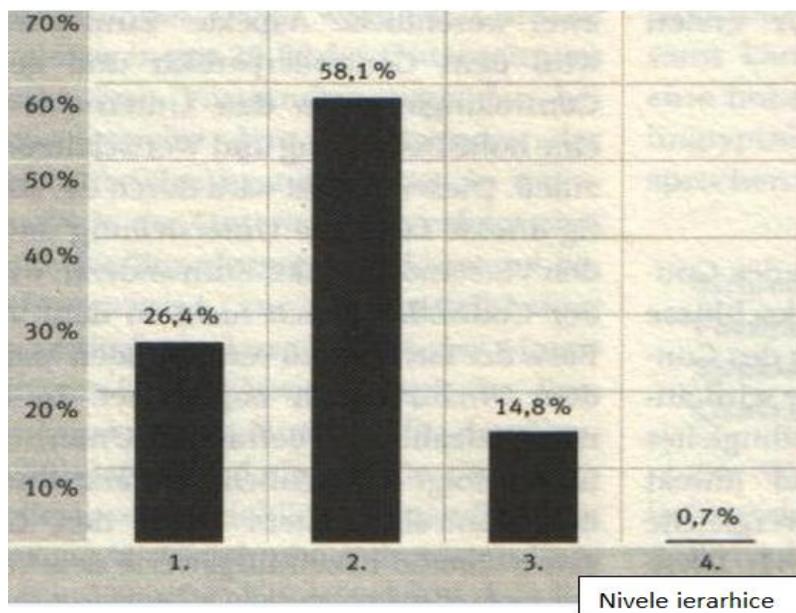
Because the controlling was born „when it became necessary, because of the large volume of accounting involved, or advantageous for other reasons, to separate the accounting functions from the secretarial and financial functions of the corporate business’’(Jackson 1949, Pag.9), delimitating it from the general accounting becomes necessary.

Both the internal and the external accounting are in a harmonization and integration trend due to the international standards of financial reporting. For a controller the internal accounting holds the first place (Horvath&Partners 2009: 34), but they both represent the sources of collecting information that is to be processed by the controlling. If the internal accounting is oriented both to the past and the future by providing only information, the controlling is oriented exclusively to the future by having a role of interpreting and capitalizing the information.

By becoming an open concept controlling has extended beyond the goal of managerial accounting and came to be considered a constitutive element of the management process (Roso, Vormweg and Wall 2005: 75). The German concept of controlling focuses on a guiding system, while the American managerial accounting „is concerned with the operative satisfaction of managerial information needs(Roso,Vormweg and Wall 2003:61).

Accounting Management is usually associated with the financial accounting unlike the controlling that has an affinity toward the management(Hoffjan și Wömpener 2005:50). In the study below one can notice that in 85% of the situations the controller (the coordinator of the Controlling department) holds the first two levels of the hierarchy inside a company.

Figure nr.2 Controller in the hierarchy inside companies



Source: Weber, Hirsch and Spatz 2007: 25

In the German speciality literature the concept of „Accounting management“ is used seldom as it is considered a synonym for the concepts of „cost accounting“ or „controlling“. The usage of both these concepts in different economic areas has led to a high sensitivity in delimitating them. Although the position of „controller“ was born in the USA, the concept of controlling under this title can be encountered only in the German space. During the last decade the controller became the internal consultant of a company and holds the role of assuring the rationality in the profitable leading of the company.

Among the decisive factors in defining the two concepts there are the economic and social situations, the political context, the influence of other countries, the cultural and academic factor. Due to the internationalization of the economic relations the usage of the concept „managerial accounting“ increased, both at the practical level and in research.

3.Conclusion

The development of conceptual conventions in order to avoid the negative consequences of using the terms in an erroneous manner needs to be encouraged, being necessary intense studies in the field of Comparative Management Accounting, whose research promoting is represented by the studies conducted by Alnoor Bhimani. The development, presentation, and conceptualization of controlling represents a continuous debate in the German academic field. The attempts of defining controlling have not succeeded so far to establish a unitary and well delimited concept, the research in this field being characterized by a cyclical nature. This article is part of the research conducted for my doctoral thesis, "Controlling in heterogenous economic environments", under the coordination and supervision of Prof.Dr.Dumitru Matiș.

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FREE CASH FLOW AS PART OF VOLUNTARY REPORTING. LITERATURE REVIEW

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The present study has as main objective to reflect the state of literature regarding free cash flow, and to withdraw the main pro's and con's in order to create an objective image upon this indicator. The main idea generating this research was the growing interest on cash flow reporting. As many say, "Cash Flow is King", while in Anglo Saxon countries the interest of investors and analysts is concentrated on operating cash flow, as the most important indicator of the probability of bankruptcy. In this context, voluntary additional reporting, like free cash flow may come either as an aid in providing the fair view or as an opportunistically reported figure. Throughout the paper, the intention was to provide answers to three main research questions: "What are the definition and calculation method of free cash flow? Why is there an interest in free cash flow reporting? What is the impact of free cash flow on the agency theory?" In order to provide relevant conclusions, four international data basis were used, and related articles and studies were extracted. The results proved that there is no generally accepted definition and computing method, while the format depends on the end-user of the report (shareholders, investors, analysts, bankers, a.s.o.). As stated below, this aspect generates confusion and lack of comparability, giving room to creative accounting techniques. Moreover, the interest on free cash flow reporting is connected mainly to liquidity assessment, company valuation and investors' choice. Still, in the context of agency theory, results show that in presence of high free cash flow, managers tend to make investment choices that satisfy their personal interest and that generate low efficiency and profitability for the company. The contribution to current state of research is providing a literature review study, focused on a comparative approach, as well as on underlying an objective image upon a debatable financial indicator and accounting report.

Keywords: free cash flow, reporting, management, agency theory, creative accounting.

JEL Codes: M41

1.Introduction

In a fast moving and transforming reality, information is the essential instrument for a manager, investor, or regulations setters. The financial strategy of any company cannot be set without taking into account the cash flow evolution. Alongside the balance sheet and profit and loss account, cash flow statement is one of the instruments for assessing the performance of a company. It gives valuable information upon the liquidity of the company, illustrates very well the difference between profitability and liquidity. Based on it, the managers can take action in due time, to control possible future problems that could lead to bankruptcy, or decide to continue cash-rich activities.

The current format of the cash flow statement is the result of a rather recent process. The national differences are reduced by the growing influence of the International Accounting Standards Board. Still, the first draft of the "funds statement" was published in 1976, by the International Accounting Standards Committee), which was followed by the revised cash flow statement (IAS 7), coming into force in 1994. Since then, it has been the cause of ongoing debates upon the best

presentation method and the effect of the allocation choices of the components. The interest upon this statement rose mostly in Anglo-Saxon countries, where the capital market is the main external financing source the investors being mostly interested in the benefit of dividends, but also where main financial scandals outlined the implications of creative cash flow.

Apart from the mandatory reporting, especially in the Anglo-Saxon countries, managers also voluntarily report other information related to the cash flow, like the so called “free cash flow”, a most debated notion. **The present study has as main objective to reflect the state of literature regarding free cash flow, and to withdraw the main pro’s and con’s in order to create an objective image upon this indicator.** In order to achieve the main objective, the secondary goals are to answer to the research questions stated below.

2. Research Methodology

In order to create a data base of relevant studies, four international sources were chosen: Ebsco, Science Direct, Wiley and Emerald. The research process started by selecting all the articles containing the words “cash flow”, in their title, keywords or abstract, issued after 2000. The result was of 1,168 articles from Ebsco database, 976 from Science Direct, 536 from Wiley and 141 from Emerald database. After assessing their relevance and connection to the accounting field, as well as the availability of the full text (Cluj-Napoca, Central University Library access), the final sample consisted out of 239 articles (162 from Ebsco, 36 from Science Direct, 10 from Wiley and 31 from Emerald). The main ideas and hypotheses related to free cash flow were identified, through analysis, synthesis and generalization processes. The main opinions presented, based on which the concluding remarks were constructed, were from studies concentrating on the indicator of free cash flow while being representative for the type of issues raised by accounting and financial specialists.

The main areas identified try to give response to the following **research questions**:

Why is there an interest in free cash flow reporting? What are the definition and calculation method of free cash flow? What is the impact of free cash flow on the agency theory?

3. Developing the research process

What are the definition and the calculation method of free cash flow?

There is a diversity of opinions in defining this notion. Adhikari and Duru (2006: 311-322), consider cash flow to be the amount of cash available to shareholders, without reducing the business value. They calculate this indicator by deducing from the operating cash flow the amounts needed for capital expenditures, in order to maintain the production capacity of the company. They acknowledge also the possible definition relating to free cash flow as the cash remaining at the managers’ free choice, obtaining the final value by deducing from operating cash flow the amounts needed for capital expenditure, dividend payment and loans reimbursement.

Roger Hussey & Andra Ong (2005: 268) define cash flow as a measure of the amount of cash available for dividend payment, financial debts payment and for development of the company. Artiachea, Leea, Nelson & Walker (2010: 31-51), consider free cash flow an assessment of the company’s liquidity, while a high figure indicates a financial capacity of investing in sustainable projects, without sacrificing the claims of third parties. PhD. Prof. Ioan Batrancea (2008, 135-136), describes free cash flow as “money put aside”, being in fact cash generated by the company for its shareholders, after paying financial debts and performing necessary development investments.

Kousenidis (2006, 645:653) considers free cash flow to be the operating profit after tax payments, after non cash adjustments, and investments in current and long term assets. The appropriate definition is considered to be the cash generated by the company, available for all the parties insuring the capital of the company (equity and financial debt). The same calculation

principle is adopted by Nick Antill & Kenneth Lee (2008, 19), except for the non-cash elements, replaced solely by depreciation.

Hackel, Livnat & Rai (2000: 1-24) assess free cash flow to be the operating cash flow, after deducting capital expenditures, acknowledging potential errors arising from not separating the investments needed for maintaining current growth rate, from excess investing, depriving the shareholders from deserved "reward". Robinson, van Greuning, Henry & Broihahn (2009, 250-251) have the same vision, considering free cash flow as the operating cash flow exceeding the capital expenditure amount, while accepting also the extended formula taking into account non-cash adjustments. S.H. Penman (2001) also sees cash flow as generated by operational activities, after deducing investment cash flow. He also states the fact that low free cash flow could indicate future significant increase (when used to finance investments). Jones & Sharma (2001, 18-39), define free cash flow as the cash collections from customers, minus payments towards suppliers and cash outflows related to investments, while finding in certain conditions a statistically significant connection between free cash flow and earnings management. Mulford & Comiskey (2005: 345-376) consider free cash flow the antidote to earnings management, and admit that the definition depends on the users: cash flow available for dividend payment, for loan reimbursement and interest payments.

To conclude, there can be said that there is no unanimous definition and way of calculation, which is where the danger of opportunistic management may arise, as almost all specialists admit.

Why is there an interest in free cash flow reporting?

There are opinions stating that companies choosing to report free cash flow, do this in order to improve the image of their performance in the eyes of the analysts and investors (Adhikari & Duru, 2006), by proving that most of the companies studied had low profitability and high leverage. Others (Fuller & Blau, 2010) state that companies would report free cash flow so as to signal future dividend payments, observing that mostly medium performing entities adopt this kind of reporting. Mulford & Comiskey (2005, 345-376), believe this increasing interest in reporting the indicator is a result of a growing attention from investors towards cash flow in general. The same opinion was stated by other specialists, like David Henry (2008), or Robinson, van Greuning, Henry & Broihahn (2009, 250-251) and J.E. Ketz (2003: 236-237).

Still, the creative accounting techniques must be considered, and so some researchers associate free cash flow reporting to manipulative intentions of managers. J. Edward Ketz (2003: 236-237) draws attention on the free cash flow multiple possibilities of reporting, leaving the possibility for managers to choose the one favoring the company's figures. He provides the example of deducing the amount of free cash flow from earnings adjusted, leaving it with significant influence from potential earnings management or relying on the freedom of choice permitted by IAS 7 and including components in operating cash flow to boost its amount. Jones & Sharma (2001: 18-39), prove that for companies not reporting their cash flow on quarterly basis, there is a statistically significant positive relation between free cash flow amount and earnings management.

What is the impact of free cash flow on the agency theory?

Most of the studies focused on this issue rely on Jensen's (1986, 323-329) research that proves that if free cash flow amount is significant, managers will follow their own interests and engage in high investments with low profitability. Brush, Bromiley & Hendrickx (2000: 455-472), state that through high free cash flow, managers achieve their personal interests, without implications of capital market or existing shareholders. After studying 3.320 financial reports, concluded that free cash flow only leads to increasing turnover and profitability in cases of companies with low free cash flow and without strong corporate governance, companies with no free cash flow and most importantly, companies with shareholders involved in management. Zhang (2009, 507-541)

thinks that managers tend to invest in excess when free cash flow is available, where there is weak corporate governance and no monitoring system, which can be mitigated by increasing financial debt, which restricts access to cash flow. Wei & Zhang (2008: 118-132) sustain this idea by proving that excess investment of free cash flow is a result of cheap internal sources, not to expensive resources from capital markets. Consistent with Jensen theory, Freund, Prezas & Vasudevan (2003: 87-106), demonstrate lower future performance for companies with high cash flow. Also in accordance, Nwaeze, Yang & Yin (2006: 227-265) prove that free cash flow in large amounts facilitates for managers discretionary management of investments, financial debt and dividend payments.

4. Conclusions and further research

By summing up the ideas discovered in relevant literature, we can find answers related to the research questions. However, to the first research question, the answer is that there is neither a generally accepted definition, nor a common way of calculation. Throughout the diversity generated by the existing opinions and practices, still there is one way of calculation preferred by analysts. It starts from operating cash flow, from which investing cash flow is deducted, the result being adjusted by interest payments and dividends paid. This option is not affected by accruals, thus falls off the influence of earnings management, while the result is the residual cash flow, over the break-even level, required for maintaining/increasing current production capacity.

The reason behind voluntary reporting of free cash flow is the intention of providing **positive signals** to the investors and analysts regarding the performance of the company, the potential of paying dividends and sustaining further investment. Still, the issue of manipulative free cash flow reporting is too be consider, while results prove that it might hide other flaws, mostly in profitability.

Potential creative accounting techniques should be considered when analyzing free cash flow. The growing interest in cash flow reporting was generated mainly by notorious financial scandals and frauds resulting from earnings management, but also is specific to countries with capital market as main external source of financing. All these aspects put cash flow reporting on a high place in the eyes of investors or banks, and raised the interest in free cash flow reporting.

In the context of **agency theory** the research work proves that managers tend to put their own interest first, by engaging in projects that would generate personal benefits. Moreover, due to cheap internal financing sources, managers tend to overinvest, with low profitability or value added.

Another outcome of the current study is a synthesis of main positive and negative aspects related to voluntary free cash flow reporting, provided in the table below:

Positive outcome	Negative outcome
Applicability in: <ul style="list-style-type: none"> - Liquidity analysis; - Company valuation process; - Determining potential personal future gains for investors; - Stating most relevant covenants in loan contracts; - Countervailing earnings management; - Managers' incentives. 	<ul style="list-style-type: none"> -Reasons for issuing the report may be to hide other financial problems; -Low comparability due to diversity in reporting not standardized yet; -Negative implications in the context of agency theory: stimulates managers to invest in low profitability projects, or in their own interest; - Potential manipulative choices, deriving from high diversity of defining and computing methods.

Table 1: Pro's and con's regarding voluntary free cash flow reporting. Source: authors 'projection

The further research perspectives are numerous. They derive mostly from the variety of reporting methods, leading to low comparability but also from the connection between positive free cash flow and earnings management. Finding a unanimously accepted format is a goal for many researchers and presents interest to standard setters and should start from finding the most relevant format for end-users (investors, bankers or analysts)

The current study contributes to the research area by providing a synthesis of most relevant studies preoccupied by free cash flow reporting, putting aside the main issues surrounding this financial indicator, providing grounds for further study, deriving from each of the research questions stated.

Acknowledgements

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CASH FLOW REPORTING AND CREATIVE ACCOUNTING

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Within the wide field of creative accounting, the main preoccupation of researchers surrounded earnings management. The current study comes to acknowledge that creative cash flow may distort the assessment of financial performance and should therefore, become a subject of the same interest for analysts and investors, as earnings management is. In order to reach the objective proposed, there are two hypotheses formulated, to be validated within the research: H1: Creative accounting distorts cash flow reporting within the boundaries of current regulations. H2: Real activity manipulation alters significantly the operating cash flow. The steps followed were analyzing the accounting standard related to cash flow statement, IAS 7, in order to uncover issues not taken into account, or options of allocation provided for accountants, which could lead to opportunistic choices and lack of comparability. The relevant literature was reviewed, so as to identify the opinions of accounting and finance specialists related to this subject, the results of their scientific process. The final step was a synthesis of relevant results and observations, which lead to the acceptance of the hypothesis of the research. Moreover, several techniques were identified, both related to creative accounting and to real activity manipulation, influencing mainly the figure reflecting operating cash flow, and thus the image on the potential of business continuity. Main conclusions were that the techniques applied were within the limits set by the standard: opportunistic allocation of dividends and interest collected or paid misallocation of certain activities like sale of receivables, but mainly recording nonrecurring events into the operating cash flow, without separate notes of information or adjustments. Real activity manipulation should also be considered as it is even more difficult to detect, unless analysis is also performed on notes to financial reports and the figures within the profit and loss account. The contribution of the current study is providing a synthetic argumentation to why cash flow should be analysed in the context of creative accounting, reviewing methods and techniques that distort significantly the results of operating activity, providing basis for further study related to the impact of such practices on forecasts of cash flow and predictability of bankruptcy.

Keywords: operating cash flow, creative accounting, nonrecurring activity, IAS 7, financial performance

JEL Codes: M41

1.Introduction

Creative accounting and the multiple accounting reporting manipulation techniques have been subject to extensive research and study. Recent financial scandals have put under suspicion the quality and accuracy of financial reporting. Most of the studies seem to concentrate, however, on earnings management as the focus for accounting manipulation. An example is the study of Pablo Fernandez (2008) considering that “Cash flow is a fact. Net income is just an opinion”. Like others (Sharma D., Iselin E., 2003, Verbruggen S., Christaens J., and Milis K., 2008), he considers earnings to be a result of various accounting hypothesis, affected by manipulative options (revenue recognition, capitalization of expenses, depreciation method, etc.).

For this reason, the opinion that cash flow statement is less a subject of opportunistic management, is widely accepted. This conclusion has led to lower interest on potential creative cash flow.

The second issue leading to the present study was the decreased comparability of cash flow statement given the freedom of choice related to operating cash flow reporting (direct versus indirect method, allocation of components between the three types of cash flow). This concern generated the idea of potential opportunistic choices.

In this context, the object of the current study is **to determine whether creative accounting could affect cash flow reporting to such a degree as to distort and corrupt the assessment of financial performance**. In order to reach a conclusion, the study is intended to discover the validity of the following hypothesis:

H1: Creative accounting distorts cash flow reporting within the boundaries of current regulations.

H2: Real activity manipulation alters significantly the operating cash flow.

2. Research Methodology

The first step was to identify the relevant international standards related to cash flow reporting, and the options left for accountants. The main concerns identified were related to operating cash flow and the lack of clear allocation principles for some of its items, as well as the differences between direct and indirect method of reporting (both allowed by the standard - IAS 7).

We have then reviewed relevant literature, mainly articles debating various issues on cash flow reporting, going through approximately 200 studies selected from international data bases. The main ideas and concerns related to creative cash flow have been selected, and afterwards synthesized.

The third step was following the principles of deductive analysis, the general issues being identified, as well as the way they fold on existing regulations, and the impact on cash flow reporting.

3. Creative cash flow within the boundaries of current regulations.

The operating cash flow is the key indicator of the company's liquidity and the capacity to sustain main business. It is no surprise, then, why it has proven to be main target of creative cash flow reporting. Like Mulford C.W and Comiskey E. E. (2005, p. 19) state, creative reporting refers to the steps followed in order to create a distorted image on operating cash flow, by supplying deceiving signals on the financial health of the entity.

The effect of misplacing items within the report

One of the first observations was the flexibility of the standard, allowing some items to be allocated so as to boost operating cash flow, being misplaced between operating, investing and financing cash flow.

Mei Luo (2008: 422-423) is preoccupied with what he calls "unusual cash flow". He detects various cash outflows included into operating flow, like restructuring the activity or research and development, but more related to the investment activity. This misallocation influences the forecast of analysts, expecting these outflows to be recurrent (since they are reflected into the operational section), thus the future results would show an increase instead of maintenance of operating cash flow. Another issue debated by Mei Luo but also by others, is the sale of receivables, that influences positively the operating cash, being actually in substance a cheaper way of financing the activity, and that should be reflective in the financing section. Neil Weiss and J.S. Yang (2007: 2-4) criticize the flexibility of the standard, which allows two choices of allocating interest and dividend payments (either operating or financing cash flow), affecting the comparability of financial reports. Like Mei Lou (2008), they underline the distortion of

perception created by the sale of receivables, similar to a bank loan, but actually boosting operating cash. Weiss and Yang (2008) observe the option permitted by IAS 7 to reflect dividends received as operating (instead of investing) cash flow, thus offering the possibility of big multinational corporations to “play” with high amounts, requiring dividend collection from subsidiaries in order to increase operating cash result.

Nonrecurring elements reflected as recurring through lack of informative notes

A large part of related literature is preoccupied with nonrecurring cash flow, reflected as recurring. Since operating cash flow is “the star”, reflecting the sustainable on-going part of cash, analysts and investors usually predict constant evolution, unless other information is provided, related to changes in activity, increase in production capacity or reduction of activity. Companies may intentionally leave the impression for some transactions with positive result, to be recurrent or assess the ones with negative cash as nonrecurring.

Mulford C.W. and Comiskey E. E. (2005: 211-212) state that current accounting standard does not define the term of “nonrecurring cash flow”, probably considering the end-users will be able to recognize it, if case. They have observed examples where, even if the cash flows are actually recurrent, their value is nonrecurring, inconstant, or may derive out of other activities than the operational ones, considered in theory as recurrent. The two specialists select out of the financial statements analyzed a few examples of nonrecurring elements included into operating cash flow: advance payment of stock, restructuring payments towards suppliers, inflows generated by discontinued activities, inflows and outflows from litigations, collecting business insurance policies, etc. They recommend extra attention to the notes added to financial statements, and to complete the process by also analyzing the profit and loss account. B. Elliot & J. Elliot (2008: 657) assess that the standards should impose a separate reporting of the cash flow necessary for assuring the maintenance of current business capacity from the one necessary for extending the business, because the lack of this information distorts the image upon future performance.

Direct versus indirect method of reporting operating cash flow

IAS 7 offers the possibility to accountants to state the operating cash flow either through the indirect method (deriving from profit and loss figures, adjusted for noncash elements and changes in working capital), or the direct method (reflecting main inflow sources and outflow destinations) of reporting. Since the indirect method is deducted from the results from profit and loss account, it is obvious that the effect of earnings management leaves marks on the statement of cash flow. Like Anne Britton and Chris Waterston (2005: 161) state: if cash flow reporting is wanted, there should be only one method, the direct method. This would avoid confusion in the minds of end-users that may have difficulties in reconciling operational net income to cash flow.

Moreover, the cash flow statement could become an efficient instrument in detecting creative accounting techniques applied to accrual figures. Howard Schilit (2003, 203) noted that by comparing operating cash flow to earnings, we should find warning signals in case of high discrepancy. A high net income, opposed to a negative or low cash flow should generate suspicions on the quality of incomes and the potential too high operating expenses. A high value of operating cash flow, though, in the context of low profitability, is another warning that should lead to thorough analysis. C. W. Mulford and E. E. Comiskey (2002) propose a series of actions to be followed in order to correctly compare operating cash flow and income. The authors even recommend new indicators like „adjusted cash flow”. In order to reach this figure, cash flow must be adjusted for nonrecurring events. In this respect, a few elements must be isolated, like cash flow from discontinued operating activities, tax payments that can be classified to financing or investing activities, transactions related to assets held for transaction, capitalized expenses included into period’s operating expenses or other significant isolated events leading to changes in operating assets or liabilities.

4. Real activity manipulation of operating cash flow

Cash flow management is necessary in order to provide the liquidity necessary for business continuity. The managers must supervise the cash collecting systems as well as the current assets management (transformation of receivables and stock into cash). Reider and Heyler (2003: 35-38) define the objectives of an efficient cash control: To insure the availability of cash in accordance with payments; To identify the cash excess in order to invest it so as to generate profit; To account all transactions in order to insure the correct recording of data; To control the cash flow so as to avoid theft or fraud.

Although, this is all true, there are some decisions of cash management that may opportunistically favor the cash flow of a certain period. In this respect, Divesh S. Sharma (2001: 11-12), one of the advocates of the utility of cash flow reporting, underlines certain manipulative management activities like intended delay in payments towards suppliers (translated in increase in cash flow), or stock reduction under normal level, all generating additional operating cash. All these action may signal a company under financial stress. Other types of manipulative actions are artificial increases in investing or financing cash flow meant to cope with the lack of operating results, which could be a sign of probable bankruptcy. Howard Schilit (2002: 199-203), points out the managers that in the context of insufficient operating cash flow necessary for business continuity decide to take measures like fixed assets sale, increase bank loans or excessive stock reduction. G. J. Benston (2006, 478-480), analyzes the reasons behind the bankruptcy of Enron. He noted the artificial increase in operating cash flow by masking a huge bank loan behind a gas delivery contract, or starting up affiliated companies contracting loans, the figures in cash finally helping the ones of Enron through consolidation of financial report. Hugo Nurnberg (2006: 217) identifies another real activity manipulation. He observes how operating cash flow is boosted not through collections related to sales of goods and services or better cost control, but through sale of existing business lines or is diminished not due to payments to suppliers, but to business acquisition. In these cases, at first, the investing cash flow is affected through one time figure, but post-acquisition data influences operating cash flow, including receivables and stocks transformed into cash, from the acquired business. Nurnberg noted examples of such opportunistic decisions, clearly related to the improvement of operating cash flow, in order to fulfill a certain level of financial indicators so as to have access to bank loans, to influence the result of company valuation process or to achieve the objectives set by shareholders.

5. Conclusions and further research

Following the steps proposed of the current research process, we have encountered reasons to clearly validate both of the hypothesis assumed: *H1: Creative accounting distorts cash flow reporting within the boundaries of current regulations. H2: Real activity manipulation alters significantly the operating cash flow.* By reviewing relevant accounting and financial studies, we have identified clear ways of manipulating the image of a company's liquidity, thus reaching the conclusion that creative cash flow exists and its detecting plays an important role in determining the accurate financial performance and the probability of bankruptcy, since almost all applied techniques affect the operating cash flow, the fundament of business continuity.

We reflect below, main manipulative actions discovered, affecting operating cash flow, within the limits set by IAS 7:

Method	Technique
<i>Creative accounting</i>	Allocating dividend and interest payments to financing rather than operating cash flow;
	Allocating dividends and interest received to operating rather than investing cash flow;
	Reflecting sale of receivables to operating activity (rather than

	financing), without even related explanatory notes
	Recording nonrecurring cash flows into operating cash flow, without additional notes reflecting the lack of continuity;
	Misplacing investing flows or hiding financing inflows into operating activity;
	Using indirect rather than direct method of reporting operating cash flow;
<i>Real activity manipulation</i>	Excessive sale of stock or unnecessary discounting of receivables;
	Intentional delays in payments towards suppliers;
	Forcing investing or financing activity to cope with lack of cash, with positive impact on future operating cash flow;

Tabel 1. Methods and techniques of cash flow manipulation. Source: authors' projection

The contribution of the current study is a synthetic argumentation to why cash flow should be analysed in the context of creative accounting, reviewing methods and techniques that distort significantly the results, providing basis for further study related to the impact of such practices on forecasts of cash flow. Having in view that a wide majority of researchers consider future cash flow as the best indicator of the probability of bankruptcy, and although current net profit is the basis of such estimation, we have to admit that current cash flow provides significant additional information. The intended future research of the authors' is actually determining potential manipulation techniques applied by Romanian companies, by analyzing the financial reports made public by listed firms. This will be performed by applying the check list proposed by C.W. Mulford and E.E. Comiskey, in their 2002 research work, "The Financial Numbers Game. Detecting Creative Accounting Practices".

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A NEW APPROACH OF CONCEPTUAL FRAMEWORK FOR GENERAL PURPOSE FINANCIAL REPORTING BY PUBLIC SECTOR ENTITIES

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The importance of accounting in the modern economy is obvious. That is more elevated bodies of the European Union and elsewhere dealing with the organization and functioning of accounting as a fundamental component of business (Nistor C., 2009).

The mission of the International Federation of Accountants (IFAC) is to serve the public interest, strengthen the worldwide accountancy profession and contribute to the development of strong international economies by initiating and encouraging the professional standards of high quality, the convergence process these international standards and to discuss issues of public interest which is extremely relevant international experience of (IFAC, 2011).

Currently, the concepts related to financial reports in public sector are developed by IPSAS references. Many of today's IPSAS are based on international accounting standards (IAS / IFRS), to the extent that they are relevant to the requirements of the public sector. Therefore today's IPSAS are based on concepts and definitions of the IASB's conceptual framework, with changes where necessary for public sector specific approach.

Thus this study present this brief draft statement under discussion by the leadership of IFAC in collaboration with other organizations and groups that develop financial reporting requirements of the public sector. Then, we highlight the importance and the degree of acceptance of the project which results from comments received. On the basis of combining qualitative with quantitative research seeks to demonstrate the necessity and usefulness of a common conceptual framework of the International Accounting Standards (in this case the Public Sector), starting from their emergence from presenting their bodies involved in the foundation, the content standards, experience of different countries. The results have direct implications on Romanian public accounting system, given that the reference of the international implementation and reporting is an actual goal.

The study is primarily addressed to graduate, doctoral students, professors and researchers working in public sector accounting. The study aims at presenting the acceptance of the theme subject for discussion by the IPSASB. It is addressed also to all those interested to know the current evoluția development of International Public Sector Accounting.

Keywords: financial reporting, consultation paper, public sector, public sectors references, Romania

JEL: M40, M41

Introduction

When IPSASB (International Public Sector Accounting Standards Board) initiated the first program, chose to begin by developing a core set that can be reliably adopted by those entities that have problems with financial reporting.

Many concepts, definitions and principles have been considered and integrated in IPSAS as IAS / IFRS has been developed them. However, until now, these concepts, definitions and principles were not explicitly identified or detailed. In several countries, national standards bodies have defined a conceptual framework adapted to local institutional and political system. An important part of the published work of these bodies is dedicated to the conceptual framework. The Council considers that it is time to develop a conceptual framework for general use international financial

reporting (financial information) for public entities. IPSAS will support the conceptual framework to be applicable in different states and different jurisdictions regardless of political system or type of regim. It should take into account: a) socio-cultural traditions b) form of government c) mechanisms for service delivery exists in many jurisdictions that adopt IPSAS.

The IFAC has released international public-sector accounting standards for all public-sector entities, whether they are national central governments or local governments since 2000 (Oulasvirta, 2010). The most IPSAS published until now are based on International Financial Reporting Standards (IFRS) - developed by the International Accounting Standards Board (IASB). This consultation document resulting from the first phase of the Council activity wants to develop a conceptual framework of the general purpose financial reporting and address the following issues:

- The role and authority of the conceptual framework;
- Objectives of financial information;
- The scope of financial information;
- Qualitative characteristics of information contained in financial reports for general use;
- Nature of the entity to submit financial information.

Brief History of Conceptual Framework for General Purpose Financial Reporting by Public Sector Entities - Consultation paper

In July 2006 it has been established a collaborative project between the IPSASB and representatives of standards bodies implementare national of Argentina, Australia, Canada, France, Israel, Malaysia, Italy, Netherlands, New Zeeleandã Spain, South Africa, Switzerland, United Kingdom, USA. Also participating were FEE (Federation des Experts Européens Comptables), IASB, TFHPSA (Task Force on the Harmonization of the Public Sector Accounting) and Eurostat. In March 2007, the IPSASB noted the progress and current status of the project including the initial issues such as objectives, the scope and qualitative characteristics of information have been prepared by the subcommittees.

In March 2008, the IPSASB make a review of the consultative paper on the first project, from 2007, joining the four chapters that were previously separate. These are: the objectives of general purpose reporting them financially, the scope of general purpose reporting them financially, qualitative characteristics of financial information included in the general purpose reporting entity financially and reporting. In September 2008, is approved for public comment and consultation the document - Conceptual framework for financial reporting for general use, used by public sector entities. The elements are: the objectives for financial reporting, qualitative characteristics of information included in the general purpose financial reporting, the reporting entity. This consultation paper is open until 31 March 2009.

In May 2009, began analyzing the 55 responses received for the first phase of the conceptual framework of IPSAS. Analysis of these responses continued throughout 2009 until April 2010. IPSASB also considered necessary to achieve a new draft consultation on the definition and recognition elements (second phase of the project). Then came phase three of the project document was a first measurement. In September of that IPSASB continued its efforts on three phase of the project and agreed that the next stage of development to produce a new draft consultation document. In April 2010, were discussing issues that have emerged from analyzing the responses. Further problems were discussed on two three phases of the project. In November 2010, was approved ED (Exposure Draft), which will end on June 30, 2011.

Document Highlights

The role and authority of the conceptual framework. The conceptual framework defines the concepts underlying the financial information on public sector entities adopt accrual accounting.

The conceptual framework does not define any new obligation on the financial information of public sector entities which are compliant to IPSAS and will not invoke IPSAS existing rules. However, if the situation is not covered by IPSAS standards or other documents issued by the Council, the conceptual framework is a relevant reference in the search for solutions.

The objectives of financial information are defined by users of financial statements in general, according to information needs. Users of these reports can be recipients of services, providers of resources or services concerning specific parties. A summary of their information needs was conducted. It appears that in many countries, legislative power is the main user of these reports. The financial information set by a public sector entity must provide users with adequate information entity.

The scope of financial information defined transactions, other events and activities that can be taken into account in the general purpose financial reports. Financial reporting should be large enough so that the general financial report of an entity to take account of financial or non-financial items in the past, present or future, to be understood and to provide financial data.

Qualitative characteristics of information contained in financial reports for general use. These qualitative characteristics are attribute ensures the interests of users of the information contained in financial reports and make general reference to the objectives defined for financial information. Qualitative characteristics of financial information provided in reports on the general use of public sector entities are: relevance, reliability, understandability, timely availability, comparability and verifiability. General purpose financial reports are also subject to general constraints relative importance, cost and the appropriate balance between qualitative characteristics.

The nature of the entity that presents a conceptual framework to the financial information is not intended to designate parts of government or public sector entities. The nature of relations between the legislative and executive and financial information on the consequences of these relationships are raised equally.

Research methodology

The main objectives in our paper are: the conceptual history of public sector accounting, analysis and presentation of a consultative paper: Conceptual framework for reporting them financially in the public sector - in September 2008, detailed analysis of the received 55 responses. From the methodological point of view, a qualitative research is conducted, based on books, articles, publications and electronic resources of the Internet, but also a sustained quantitative study being empiric. These want to submit proposals for public response and interest in this problem. We have completed these steps:

- Documentation on the responses of 55. We looked at only 54; one of the answers can not be accessed.
- Analysis and interpretation of responses, through a content analysis will build a database of answers given by respondents. By quantifying 1 (Yes) and 0 (N) will determine acceptance or denial of each view (N = 9) under discussion. We must mention that, if a respondent did not respond to a View, in our analysis we considered that View is accepted, receiving a value. We went on the premise that if he did not agree, say so.
- Once this database we conducted an analysis on the country areas, the degree of acceptance and category of respondents.

Scientific research method in this paper contribute to its efforts to deepen the knowledge of character back (required by the theoretical research done) and by the prospective (given by empirical research). IPSASB accept comments on all issues raised in the consultation document in this regard subject to debate nine key issues. As a rule on respondents answers is argument for or against. If a negative response is required proposing new solutions.

Responses are required on the following issues:

1. Authority conceptual framework - the conceptual framework will establish new mandatory requirements for financial information in the public sector, which comply with IPSAS. The selection of accounting principles applicable in certain situations that do not comply with IPSAS, public sector entities will refer to the definitions, recognition criteria, valuation principles and other concepts identified in the conceptual framework that could be applied.
2. General purpose financial reports - are designed to meet the needs of general information for a wide range of potential users.
3. Users of general purpose financial statements (general purpose) - to identify common information needs of potential users of general purpose financial statements reports, these users are identified by: recipients of services or their representatives; taxpayers or their representatives; other parties, including interest groups and their representatives. Legislative power is one of the most important users of financial reports generated by public sector entities.
4. Objectives of Financial Reporting - by public sector entities are to provide useful information for users of the reports by: evaluation; taking responsibility for resource allocation decisions in politically and socially.
5. The scope of financial information. Area of financial information includes financial and non-communication of data: economic resources; effect of transactions, other events and activities that alter the economic resources, rights to these resources during the period, including incoming and outgoing numbers, and financial performance; compliance by the reporting entity laws or regulations applicable to the adoption and approval of budgets and justification taxes and fees; the information the prospective financial and other information on future activities. The field also includes financial information, providing explanatory documents: a) The main factors affecting the entity's financial performance, achievement of service delivery and other goals that may have an influence on future performance. b) The assumptions underlying them financially in the reporting of information presented in general purpose and key uncertainties.
6. Evolution of the scope of financial information. Financial reporting must evolve according to the information needs of users and in accordance with financial reporting objectives.
7. Qualitative characteristics of information in general purpose financial reports. These features are: the relevance, which includes the value of confirmation, the predictive value or both; true image, obtained by describing fair, neutral and without significant errors intelligibility; comparability timely dissemination of financial information; check constraints. The relative importance is achieving a balance between cost and quality characteristics.
8. Features of the reporting entity. A reporting entity is mainly characterized by the existence of users who require general purpose financial reporting. A public sector entity may carry out financial information may have its own legal entity or other organization.
9. Entity composition of a group of financial disclosures. A reporting entity has the power to govern the financial and operational strategies of other entities (criteria laid value) and can benefit from the work of others.

IPSASB accept comments on all issues raised in the consultation document in this regard subject to debate nine key issues. As a rule on respondents answers is argument for or against. If a negative response is required proposing new solutions.

Results

Relative to the political map of states can be distinguished in the total number of countries on every continent, who have contributed to improving the conceptual framework (Figure 1).

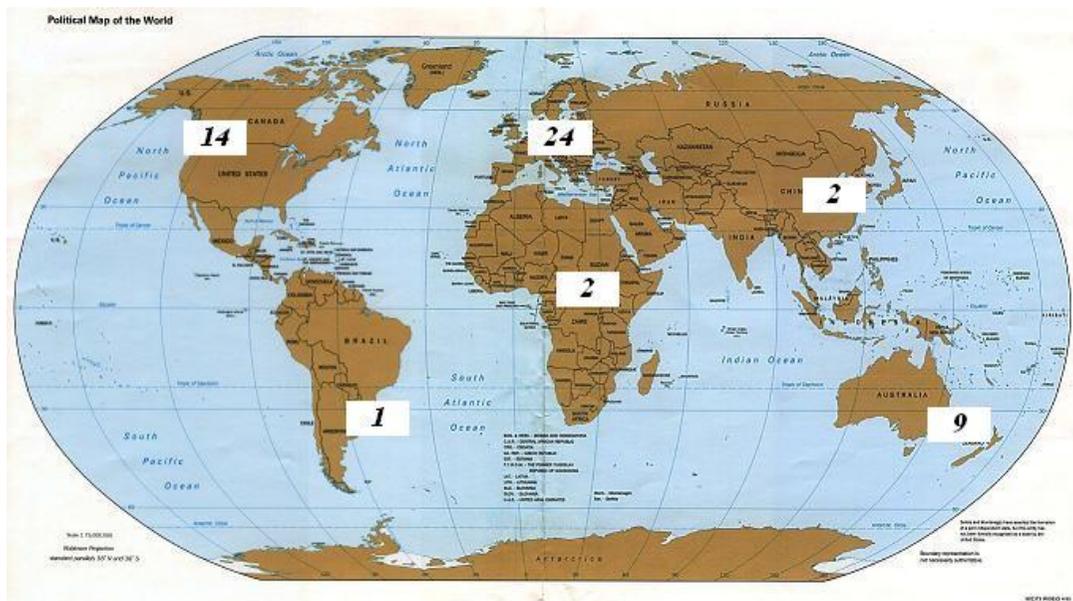


Figura 1. Country situation
Source: Own processing

The degree of acceptance of the 9 hypotheses (view) discussed is as follows (Figure 2):

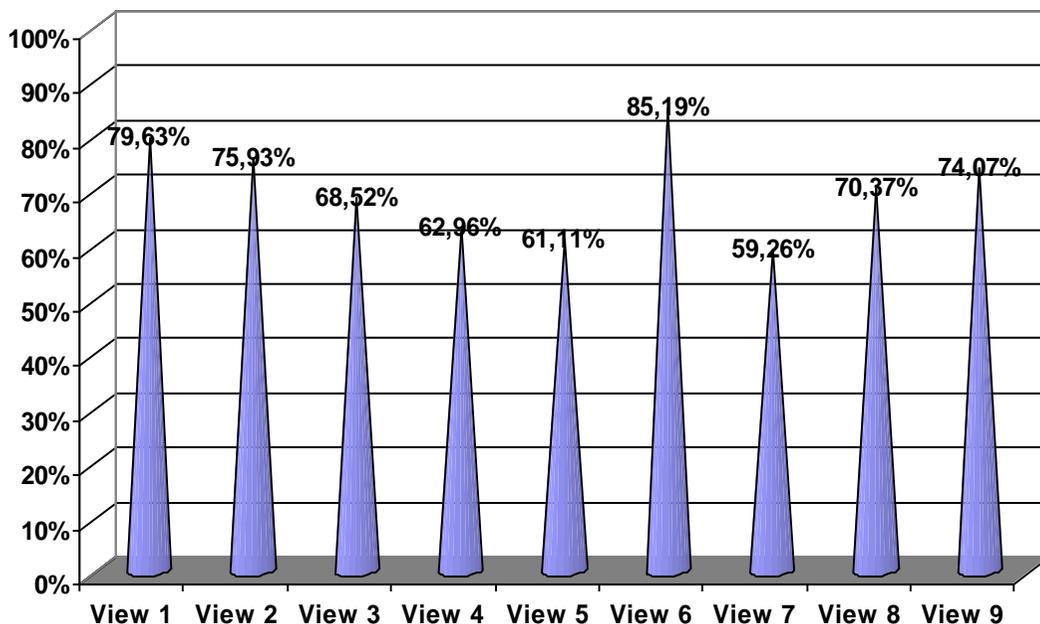


Figure 2. Acceptance degree
Source: Own processing

Overall, respondents supported referential in excess of 50%. View 6 - Evolution of the scope of financial information appears to be the most acceptable, since the few exceptions. Users agree that the scope of information includes financial information that must constantly evolve to

successfully meet the needs of users. In contrast, the subject 7 - Qualitative characteristics of information in general purpose financial reports were proved to be the most problematic situation. Most raises doubts that these quality characteristics suitable for the financial statements are not equally suited to all information in the public sector. It is clear that qualitative, adequate financial statements are equally suitable for any information on the proposed scope of the consultative document. This is illustrated by the confirmation in paragraph 4.28 of the consultation document where the quality of "verifiability" is often referred to as "affordability" in the context of qualitative information and perspective: it seems to be more than a difference in terminology. Another example: it is not clear how the quality of the "exact representation" can be applied to prospective financial information, which is not part of the financial statements.

Conclusions

IPSAS conceptual framework is found to be a controversial issue worldwide. The most frequent comments were made on the basis that IPSAS not quite explicitly defined terms used, such lines were deployed to put in place smoothly each of the nine hypotheses are preliminary abortive. From our point of view, we consider that provides a broad basic approach is correct in terms of accounting approach, but focus and retouching can head to the precise details, accurate and to the point of each element independently. Ideas drawn from the consultation document have been accumulated in strengths and drawbacks in the approach.

Following the study, we identified the following strengths of the consultative document: Consultation Paper is well written in a manner intelligible to users of financial information, are the best international practices for public sector entities, financial reporting purposes is well defined, IPSASB have taken into account in an active general purpose financial reporting. Disadvantages may be considered: the objective of the IPSASB project should not interpret the IASB, the idea that there is a potential risk and misleading public sector entities, differential treatment for public-private partnership is a controversial subject, raising many misunderstandings among users, so it is an acute need for better specification of the characteristic features of each sector, IPSASB should make a clear distinction between users of public sector financial reporting.

Future research

IFAC Board established the Council for International Accounting Standards for Public Sector - IPSASB in order to produce high quality standardized accounting to be used by public sector entities around the world for general purpose financial statements. Thus, development of accounting standards which recognition and implementation will be extended on a scale as to be geographically located in a continuous ascent. IFAC is trying to deliver some quality accounting standards for public sector in a way more obvious to all. And comments relevant IFAC can not change what has been specified or not mentioned at all. As for the future research, we believe the focus should be on highlighting all the uncertainties and to not attempt to provide remedies in the area of concern. In the hope of new works to treat more seriously as possible and improve the issues highlighted point here, we conclude that the IPSAS should take into account to optimize current criticism in the comments and congratulations to animate quality of the following future projects.

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INTERNATIONAL AND EUROPEAN ACCOUNTING CONVERGENCE-AN ESSENTIAL PART OF THE INFORMATION TRANSPARENCY “PUZZLE”

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At the level of this article, I have tried to highlight both the distinctive features of the concepts of international accounting standards, international and european accounting convergence, aspects of transparency in presenting economic and financial situations, and the interferences that characterize them, taking into account the fact that we can not talk about a specific line that can separate practically the processes these concepts involve, processes conducted at the economic entity level, by default processes involving long-term value creation.

Keywords: IFRS, IAS, convergence, economic and financial situations, economic entity

Jel codes: M41; F15; O19; M48; G11

Introduction

At the level of this article, I have tried to highlight both the distinctive features of the concepts of international accounting standards, international and european accounting convergence, and the interferences that characterize them, taking into account the fact that we can not talk about a specific line that can separate practically the processes these concepts involve, processes developed with significant implications at the economic entity. Below I intended to highlight some theoretical aspects related to the mentioned concepts. In essence, this article is meant to highlight the framework related to the concept concerning strengthen the credibility of information provided by senior management, related to homogenization, harmonization, alignment to economic and financial reporting at european level and why not at worldwide level in the attempt to ensure transparency relative to economic transactions and information provided by entities through financial reporting and beyond. In essence, at the economic entity level, concepts such as credibility of information provided by senior management, mixing, harmonization, alignment to economic and financial reporting at european level and why not at worldwide level in the attempt to ensure transparency relative to economic transactions and information provided by entities through financial reporting and beyond, contributes to an increased level of internal control within each entity, a better knowledge of their activities conducted under conditions in which they are perceived through the standardization process either european or global default leading to a better corporate governance implemented within the entity, with tangible results. In my opinion, the alignment to financial reporting standards leads to a more transparent way of activities undertaken by an entity, much more transparency concerning economic transactions, to a more realistic perception of the business environment in which the entity operates, and by default to a pro-active attitude concerning information used to support decision-making, namely internal and external environment of the entity.

Research methodology

In this article we used the comparative method relative to different perspectives and approaches to define the concepts mentioned.

Non-participating observation stands to support a short theoretical analysis in terms of interference and interdependence between internal control and corporate governance.

Regarding the typology of research, in this paper, I used a qualitative research. To achieve the objectives of this article, I used a range of research techniques, namely: the study of bibliographic references, information gathering, processing information, establishing correlations between them, selection and synthesis of information.

1. International and European accounting convergence-historic landmarks

In March 2001, the International Accounting Standards Board: IASB has become a foundation, organized in accordance with the American standardization body model (FASB). The foundation is composed of four elements:

- meeting managers (trustees);
 - the standardization body itself, the IASB, which incorporates the activities of international harmonization of the old body: International Accounting Standards Committee: IASC
 - a committee of interpretation, the interpretation of international financial reporting: International Financial Reporting Interpretations Committee: IFRIC
 - an Advisory Board of normalization: International Accounting Standards Advisory Council: IASAC.
- International Accounting Standards Board: IASB has full responsibility for development and publication of international accounting standards. They are called international financial reporting standards (International Financial Reporting Standards: IFRS). Nowadays, the general term accredited is international accounting referential, IFRS, which includes:
- International Financial Reporting Standards (IFRSx) developed by the IASB;
 - International Accounting Standards (IASx) which have supported and will support a review process by eliminating alternatives, redundancies and conflicts in their content, and those that did not required such an improvement or it was not imposed, at least for now, their removal;
 - new interpretations: issued by the IFRIC's Committee or its predecessor, Standing Interpretations Committee: SIC, they (especially the latter ones) are subject to deletions and revisions, when reality requires it.

Given the ambitions of the European Union on the adoption of international accounting referential, it is important not to lose sight of the major implications of such an option. Such adoption has brought and brings continuously fundamental changes in the area of reflection of professional accountants in the old continent. Challenges entail the disruption for those quartered in their sophisticated traditions. It is even greater as some European countries (in fact, most of them) were and still are carriers of an accounting model away from Anglo-Saxon philosophy, model which inspires the work of the international standardization body. The hallmark of these developments is in accordance with the accounting's attached target, even by international conceptual framework: providing information on the needs of investors, in substantiating their decisions on the purchase, storage or sale of financial securities held by them. From such an objective results automatically the primacy given to the balance sheet versus the other financial statements. In this report of forces places the obvious increasingly application of the principle substance over form and the appeal to a rating system based on fair value. Regarding the balance, the patrimonial balance loss of speed is obvious in favor of a structure to better express the economic and financial reality.

Increasingly appeal to fair value measurement system, does not mean abandoning historical cost and prudence, but at least reduce the presence of these accounting principles in the accounting message, leaving a closer criterion balance between relevance and reliability of the information. Fair value is primarily a market value, which means that assets and liabilities should be valued on an efficient market. Often, fair value is calculated based on models that call for updates on current values of expected cash flows of the concerned enterprise.

Appropriate training in letter and spirit of assimilation of the IFRS is absolutely necessary and it will decant values. Formulators, users and auditors of accounts should prove a great capacity for

interpretation and of wisdom, especially since these new “products” for normalization, which we call the IFRS standards and IFRIC interpretations, lead to the use of a non-negligible dose of estimation, meaning approximation, so subjectivity. The assimilation of international standards, requires the need for a national comparison between the national referential and the one “produced” by the IASB. (Feleagă L. and Feleagă N. 2006: 37-38)

2.The framework of international accounting convergence

In its first years of existence (2001-2005), the international body on normalization the IASB accomplished three major tasks:

- build a "stable platform" to include performant standards;
- mounting a strong framework for convergence of the national standards with international standards;

- mounted a flexible framework for achieving convergence to international standards (IAS / IFRS) with the american ones (U.S. GAAP). At the time when the EU decided to adopt IAS / IFRS, we can say that very often this situation has been presented as a european response to U.S. dominance concerning rules (U.S. GAAP) in view of the global financial markets. Clearly, such a statement deserves to be nuanced. For specialists, it is easy to see that Europe nowadays exerts a smaller influence on the work of international standardization body than the United States of America, even if in the old continent was decided to adopt the international referential. On the other hand, the highest altitude in the evolution of global accounting is the convergence between the two internationally recognized accounting referentials: IFRS and U.S. GAAP. On September 18, 2002, the two bodies on normalization (IASB and FASB) have agreed on a timetable and a method for convergence. It's about the Norwalk Agreement. However, so far, neither the IASB nor the FASB did not respond to questions about governance model. Given that, the IASB has chosen a policy of convergence of the IFRS referential with the (U.S. GAAP), it received a significant aid from the European Commission. Concerning the "stable platform", it should be noted that, since its first engagement, the Council of the international body focused on the practical implications of the European Commission's proposal that from 1 January 2005, all listed companies in EU financial markets to adopt the existing package of international standards reviewed, plus the new standards (IFRS). The Council also decided that only those standards developed and published until 2004 (inclusively) to be implemented in 2005. Standards developed and published after that date must be applied in 2006 or later. Concerning the reviewing process, the IASB aims required to eliminate the options (alternatives), redundancies and conflicts arising in the standards' content. In order to achieve convergence, the championed project for improvement advocated for the implementation of the best practices worldwide. The project also received the endorsement of a wide range of “actors” of the financial markets, securities' commissions of specialists, accountants, national normalization bodies, Advisory Council for normalization, of the representatives of the general public. Finally, the project has excluded a number of options contained in the IAS, because their existence and led to elements of uncertainty causing reduction of comparability.

Completion of the improvement project has been achieved in December 2003. Along with this project and to guide first-time adoption of International Financial Reporting Standards (that aims IFRS 1), it was necessary to finalize the work on four projects of a new type of standards (International Financial Reporting Standard: IFRS), the first two because of previous lack of a standard capable to constitute itself a departure guide and the other two, for achieving greater convergence between the two accounting systems-worldwide oriented (the international one and U.S one.). That's how the trailblazer IFRS 1 is followed by IFRS 2.(Feleagă L. and Feleagă N. 2006: 39)

3.Aspects pro international accounting convergence

By listing the european companies on U.S. financial markets, listing accepted by the positive signal received from the international accounting referential on these markets, investors will do their capital investment in hope of outstanding performance. Normally, financial statements prepared in accordance with international standards and accepted by the American securities (Securities and Exchange Commission: SEC) had to be pulled through the filter of convergence. An example of this is the case of clusters. By developing standards FAS 141 "Clustering" and FAS 142 "Goodwill and other intangible assets", adopted by the FASB on 29 June 2001, creating a revolution in practice, as a result of acceptance as the sole method of group purchasing and especially by changing the regime concerning goodwill impairment, swiching from the application of a damping based system to a system based on impairment testing whose result was making a call for a more flexible policy used each year. As a result, international standardization body, the IASB, was determined to rethink such a problem. IAS 22 had been undergone to several improvements. Before switching to the referential based on IFRS this standard had the following elements of content. There were accepted two significantly different methods of accounting for business groups: the pooling of interests and the union of interests and the method of acquisition. As was demonstrated by financial analysts and other users of financial statements that using two different accounting methods for similar transactions largely affects the comparability of financial data. Moreover, some specialists have found that the differentiation between the methods of accounting for such transactions concerning achieving a "desirable"result may pave the way for" tuning" the image of the company. In addition, IAS 22 offered two possibilities for applying the method of acquisition: the identifiable assets and liabilities could be assessed initially using either basic accounting treatment or an accepted alternative treatment. The benchmark treatment, identifiable assets and liabilities were recognized, being initially measured as the sum of fair values, taking into account the limit stake obtained by the buyer and the previous accounting values regarding the acquisition,and also taking into account the limit stake owned by the minority shareholding. By using alternative treatment, identifiable recognized assets and liabilities were measured initially at their fair value at the acquisition date. It is obvious that, given that similar transactions are accounted by using alternative methods,the usefulness of the information will be affected both by the lack of comparability, and by the credibility. Instead of IAS 22, which became obsolete, the international body develops and requires to listed european companies in the IFRS system to apply International Financial Reporting Standard 3, cut by the american thinking, so filtered through convergence. Among many changes brought to the new standard, it's essential to point out the following two:

Accounting Method

In accordance with IFRS 3, all clusters that fall within its scope will be accounted using the purchase method.

The subsequent accounting of the goodwill

In accordance with IFRS 3, goodwill acquired as a result of clustering will be evaluated after initial recognition at its cost, less accumulated losses from depreciation. Accordingly, goodwill is not amortized but will be verified annually or whenever there are signs that it has suffered an impairment loss. It is known that, in accordance with IAS 22, goodwill had to be amortized systematically over its useful life. IAS 22 provides also the criticizeble presumption that the useful life of goodwill may not exceed 20 years from the date of the initial recognition. From the foregoing it appears that companies have a greater flexibility so that could afford to amortize goodwill over the most convenient term for them, which led to the practice of creative accounting phenomena. Thus, entities that had a financial situation which shows a state of "good health " were tempted to retain the shorter amortization period to discard as soon as possible from this

source of future expenditure. On the other side, entities with a poor performance or even poor results preferred to choose, rather, long periods in order to spread depreciation over an extended period of time. (Feleagă L. and Feleagă N. 2006: 40)

4.Aspectes against international accounting convergence

The impact of the cultural factors is an essential vector concerning the analysis of social systems changes. Culture influences both norms and values of these systems and the behavior of groups in interaction or within systems these and also influences the relations between systems. Differences between national accounting systems are often regarded as cultural differences. This qualification can lead to confusion, since it assumes that there are needed different accounting systems from one country to another. Accounting pressures have changed once with the phenomena of economic globalization. In essence, no country can claim to have a perfect accounting referential. The United States is the country which has the longest tradition concerning the accounting normalization. It has the most important accounting standardization body, characterized by a very high level of professionalism. But even U.S. accounting rules point out compromises between different interests. Turning to the details of these rules, it appears that many of these "compromises" are far away from creating an unanimous framework among the american accountants. In order to be efficient, this huge effort should be continuously done by the international body :IASB. It has gained its legitimacy through the efforts of the representatives of many countries and by the appeal to strict international procedures. The accounting system of a country it's in essence as a social construction depending on the nature and trends of society. Beyond this aspect, the accounting system of a country depends on the emergence of particular phenomena and also on the exchanges the country develops with other countries. Specialists in the field claim that the big companies of any country, large groups and multinational companies are attracted to the magnet of globalization. What is sad is the fact that small and medium-sized enterprises have little chances not to be "crushed" by this giant "mixer". (Feleagă L. and Feleagă N. 2006: 41)

5.Conclusions

The need for a single accounting "language" in transmitting accounting information, the international accounting practice of the last period, in line with the current context of globalization emphasize through the experts' assertion in the field the following significant advantages relative to the adoption of a common "language" in transmitting financial and accounting information namely:

- development of large corporations;
- group of companies' expansion;
- global integration of capital market;
- development of financial instruments;
- single market in Europe, including with regard to accounting;
- impact of different accounting standards on the profession.

These factors are closely correlated with the increase registered on the capital markets in the recent years and the increased interest shown by companies to obtain financing in these markets. By switching to the application of IFRS, companies will adopt a global financial reporting language that will allow them to be perceived correctly, regardless of users. Many european companies have already found that the adoption of IFRS brings them access to international capital markets, can reduce their costs and can more easily conduct international transactions. Communication in a unique language provides a greater level of trust and leads to increased opportunities for access to capital markets. It also allows multinational groups to apply common accounting principles in all branches, which can optimize internal communication and quality

reporting to top- management. At the same time, the application of IFRS may facilitate purchases and sales processes by providing a higher level of trust, relevance and consistency of accounting perception.

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AN INVESTIGATIVE STUDY REGARDING SMES SPECIFIC ACCOUNTING POLICIES

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In this paper we intend to continue the research regarding the enterprise accounting policies and the manner in which these are perceived by the practitioner accountants, Assistant Lecturers of financial statements. This time, in order to carry out the research, we made up a new questionnaire applied to the same sample, containing a number of 100 SMEs in Bihor County, selected according to the criterion of the average number of employees and that of the level of net turnover at the end of 2008. Continuing previous conducted research we have investigated this time the specific accounting policies of the sampled SMEs from Bihor County and the way these policies are understood by practitioners and implemented in order to prepare financial statements. Surprisingly, we have found that only 93.33% of the respondents agree that the elements presented in the annual financial statements of the entity are evaluated in accordance with the general accounting principles stipulated in Order 3055/2009, according to the accrual accounting. Half of the people interviewed had in view all four qualities of accounting information (intelligibility, relevance, credibility, comparability) in drawing up the annual financial statements, and most of them (56.67%) are not aware of the possibility to use a significance threshold (10%-15%) of the total value of that particular category of assets, liabilities, expenditure, income and results for an as faithful as possible presentation of information in the balance sheet and in the profit and loss account.

Key words: accounting policies, financial reporting, disclosure, SMEs

JEL codes: M41, M10, C81

1. Introduction

Our research hold forth to initiate a questionnaire based research in order to see the main perceptions of the accountant working in a small or medium sized enterprise, on accounting policies and their utility in providing the faithful image given by the accounting. The central objective of our research is to determine the degree of sensitivity regarding the formulation of written accounting policies by the Bihor county SMEs and the setting up of a manual of accounting policies and procedures at a certain entity level. We used directly applied questionnaires, on selected SMEs. Within each firm, we wanted to ask a person from the accounting department or from the management team to fill the questionnaire. Almost in all the cases the respondents belong to the accounting department, in most of the cases being the chief accountant or the firm's economic director. The structuring of the questionnaire was made on 3 essential levels: 1. general information about the respondent; 2. questions testing the managers or the accountants' perception on the enterprise accounting policies; 3. personal data about the respondent. In total, the questionnaire had 30 questions out of which, 11 require answers from a scale from one to five, varying between strongly agree (5) to strongly disagree (1).

In this paper we intend to continue the research regarding the enterprise accounting policies and the manner in which these are perceived by the practitioner accountants, Assistant Lecturers of financial statements. This time too, in order to carry out the research, we made up a new questionnaire applied to the same sample, containing a number of 100 SMEs in Bihor County, selected according to the criterion of the average number of employees and that of the level of net turnover at the end of 2008. Continuing previous conducted research we have investigated this time the specific accounting policies of the sampled SMEs from Bihor County and the way these policies are understood by practitioners and implemented in order to prepare financial statements.

2. Literature review

Several researchers (Hagerman & Zmijewski, 1979; Zmijewski & Hagerman, 1981; Francis, 1987; Leftwich, 1981; Gopalakrishnan, 1994) have been trying to explain the motivation of the managers in choosing the accounting methods and why the capital market reacts to the accounting changes imposed. In the literature regarding accounting policies, the researchers have used the following perspectives in order to identify the determinants of the accounting policies: the opportunistic behaviour, the efficient contacting and the perspective of the information.

On the other hand, in other studies (Tarca, 2002; Gernon and Meek, 2001; Saudagaran, 2001; Schipper, 1999; Nobes, 2000) the impact of international harmonisation pressures on companies' choices of accounting policies is investigated. Demands for greater comparability in reporting have arisen from increased international business activities and greater participation in global financial markets. Companies may seek more harmony in their reporting if they expect greater comparability to have more benefits than costs. If a company selected policies that were consistent with IFRS, then it would increase comparability of reporting with other companies using IFRS. An interesting research is presented in Gietzman and Trombetta (2003) study regarding disclosure interactions: accounting policy choice and voluntary disclosure effects on the cost of capital. In their research the authors considered how disclosure of accounting policy interacts with subsequent choice over voluntary disclosure of a non-financial performance metric. Other previous research works (Myers and Majluf, 1985; Healy and Palepu, 2001; Lang and Lundholm, 2000; Paprocki and Stone, 2004; Levine and Smith, 2006) build their study on investigating or examining choices of critical accounting policies, testing whether the quality of critical accounting policy disclosures is significantly associated with a proxy for information asymmetry. Critical accounting policies are the three, four or five policies that are very important to the portrayal of the company's financial condition and results and that require management's most difficult, subjective or complex judgments often because they require estimates about the effect of matters that are inherently uncertain. Such disclosures are intended to reduce information asymmetry.

Domestic accounting literature is mainly preoccupied with the conceptual aspects of the accounting policies and the analysis of the motivations leading to the selection of a certain policy by the management of enterprise. Authors like Duțescu (2003), Feleagă and Malciu (2002), Cernușca (2004), Diaconu (2004), Bunea (2006) are preoccupied in their research with the meanings of defining the concept of accounting policies as well as with the essential estimation criteria of accounting choices. Thus, according to Bunea (2006), if we make a review of the opinions regarding the content of the concept of accounting policies, in order to identify its nucleus, we will notice that it does exist and it is made up of an objective – restriction, represented by getting in the financial statements a superior quality piece of information, useful to different categories of users, but also from the estimation policies binomial – drafting and presentation policies of financial statements. Feleagă and Malciu (2002) are more incisive when referring to the delineation between the accounting policies and the estimation techniques: *„actually different accounting policies represent the same set of events in different ways or*

different aspects of the same set of events; on the contrary, the estimation techniques are used to get to the events that must be presented.” Cernușca (2004) considered that accounting policy requires licit and concerted actions supported by the research of the objectives suggested by the managers of the enterprise, but it can also be the expression of some implicit accounting options. The enterprise management, through the accounting policy it draws up, sets up certain objectives regarding the size of the result. The accounting policy chosen by the enterprise management has consequences on the determination of the size of result, represent a true decision of strategic management.

There are not many studies in the Romanian accounting literature preoccupied in investigating or exploring different aspects of SMEs concerning financial reporting, accounting regulation, disclosure of information or analyzing the used accounting policies. Nevertheless, it is worth mentioning the studies conducted by Deaconu *et al.* (2008), Pășcan, Neag and Virag (2009), Neag, Pășcan and Mașca (2010), Briciu, Ivan and Groza (2010). While authors like Deaconu *et al.* (2008) are mainly interested in analyzing the future accounting regulations for SMEs in the context of adopting at European level the IFRS for SMEs, Pășcan, Neag and Virag (2009) and Neag, Pășcan and Mașca (2010) focused on studies concerning financial statements or different accounting requirements for small or micro entities in Mureș County. Briciu, Ivan and Groza (2010) are concerned in aspects of development SMEs analyzing the role of accounting software and the way it encourages this segment of market.

3. Research methodology

The methodology used in the current paper is the human behaviour research methodology, whose methods are the interview, the questionnaire, the survey, the laboratory studies, the experiments etc. Regarding the investigation of the perception of the Bihor county SMEs Romanian accountants on the necessity to set up written accounting policies at the enterprise level, we used a questionnaire based survey. Thus, the empirical research was based on a pilot study constituted on a questionnaire applied in the territory. We wanted in this way to take the pulse of the population studied which is constituted of Bihor county SMEs, sampled according to size criteria: the net turnover reported at the end of 2008 financial year and the average number of employees reported at the end of the same period.

The central objective of our research is to determine the degree of sensitivity regarding the formulation of written accounting policies by the Bihor county SMEs and the setting up of a manual of accounting policies and procedures at the level of an entity. Within each firm, we wanted to ask a person from the accounting department or from the management team to fill the questionnaire. Almost in all the cases the respondents belong to the accounting department, in most of the cases being the chief accountant or the firm's economic director. It is important to emphasize the fact that in our research we have used the aleatory sampling procedure. The structuring of the questionnaire was made on 3 essential levels: 1) general information about the respondent; 2) questions testing the managers or the accountants' perception on the enterprise specific accounting policies; 3) personal data about the respondent.

4. Descriptive statistics and results

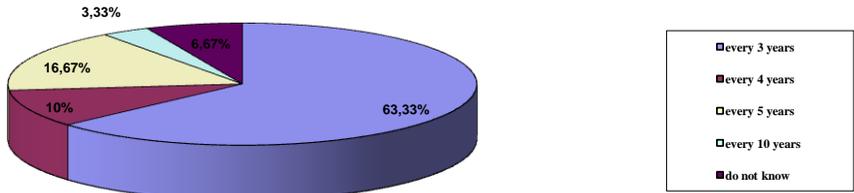
Out of the 17 enterprises which have not filled in our questionnaire, 7 have been found in a difficult financial situation, meaning insolvency and 10 enterprises expressed their clear intention not to fill in the questionnaire. Out of the total of 83 questionnaires processed, in a number of 80, the general information section was filled in, but only 77 mentioned the name of the entity where the subjects work as well. We consider that is worth mentioning that out of the total of the answers received, a number of 65 subjects have declared that they have more than 5 year experience in making financial statements, these having a weight of more than 85% of the total of

the sample, the rest having 1 to 5 year experience. Out of the 83 people interviewed, 66% were females and the distribution on age groups was the following: 41% were between 25 and 34 years old, 39% between 35 and 44 years old and the rest – over 45 years old. Regarding the subjects’ professional qualification, the distribution of the sample showed that 44% of respondents are chartered accountants that have also economic college education, 7% of respondents are certified accountants with college education and 5% have economic average education.

Our attention was focused on the 24 questions in the second part of the questionnaire, those regarding the enterprise specific accounting policies, as they are provided in Order 3055/2009.

The first 3 questions tackle the problem of presenting the accounting information in the financial statements and only 93.33% of the respondents agree that the elements presented in the annual financial statements of the entity are evaluated in accordance with the general accounting principles stipulated in Order 3055/2009, according to the accrual accounting. Half of the people interviewed had in view all four qualities of the accounting information (intelligibility, relevance, credibility, comparability) in drawing up the annual financial statements, and most of them (56.67%) are not aware of the possibility to use a significance threshold (10%-15%) of the total value of that particular category of assets, liabilities, expenditure, income and results for an as faithful as possible presentation of information in the balance sheet and in the profit and loss account. Out of 83 people interviewed, only 53.33% are aware of the fact that when entering into management the purchased tangible assets are evaluated at the purchase cost and 3.33% are not aware or have a vague opinion about the fact that the depreciation policy is based on the detailed depreciations periods used for each tangible asset and the depreciation methods correspond to the manner in which these tangible assets are used and they start producing effects the moment they are used. As a depreciation accounting method used to recover the input value of the tangible assets, 95% of the entities prefer the linear method, 1.67% use only the accelerated method and the rest apply the accelerated method for machinery and means of transport and the linear method for the rest of the tangible assets.

In accordance to the provisions of OMFP 3055/2009 *re-evaluations must be carried out with sufficient regularity so that the accounting value of the tangible assets do not substantially differ from that which would be determined by using the equitable value on the date of the balance sheet. The equitable value of the tangible assets is generally determined starting with their market value.*” As it results from figure 1, 63.33% of the interviewed companies have in view the re-evaluation of the tangible assets every 3 years, 10% every 4 years, 16.67% every 5 years and the rest either uses a too high interval of re-evaluation or they are not aware of this aspect.



(Source: authors’ calculus)

Figure 1. The distribution of answers in the sample regarding the time interval of the tangible assets’ re-evaluation

Regarding the significance threshold established for the recording of differences in the assets' re-evaluation, an important percentage (18.33%) of the people interviewed are not aware of its percentage or the usefulness of its usage, 40% apply a percentage of 5%, 38.33% use a significance threshold of 10%, a company 15%, and another only 1%. The following table (*Table 2.*) presents in a grouped manner the distribution of answers regarding the accounting policy of tangible assets in sample, noticing that only 86.67% of the respondents are aware of the fact that the modernization expenditure and capital repair services are included in the accounting value of tangible assets if these increase productivity or the life of the asset.

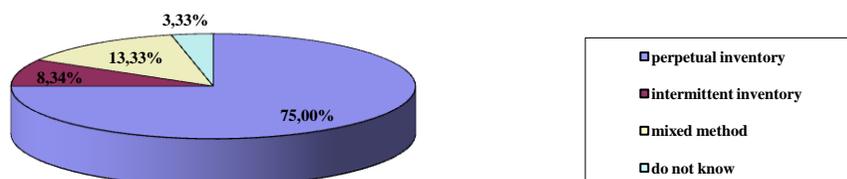
Table 2. The distribution of answers regarding the accounting policy of tangible assets in the sample

Nature of problem investigated	Answers			
	Correct	Vague	Incorrect	Total
Evaluation of purchased tangible assets	53.33%	0%	46.67%	100%
The depreciation policy is based on the depreciation periods and methods corresponding to each asset, starting to produce effects the moment they are used	96.67%	1.67%	1.67%	100%
Inclusion of modernization expenditure and capital repair services in the accounting value of the tangible assets – capitalization of costs	86.67%	1.67%	11.67%	100%
Estimation and creation of provisions when there are litigations with the suppliers or lessors/lessees of an asset at the end of the financial year	75%	8.33%	16.67%	100%
Essential changes regarding the evolution of litigations occurred between the closure date of the financial year and the date when the annual financial statements are subduced to approval are considered “an event subsequent to the date of the balance sheet, requiring accounting adjustments”	90%	3.33%	6.67%	100%
Evaluation of asset at the lessee in case of a financial leasing contract	18.18%	0%	81.82%	100%

(Source: authors' calculus)

From the analysis of data presented in the table above, it results that many of the prepares of financial statements do not abide by the principle of prudence and that of financial year independence in presenting the accounting information for a quite low percentage (75%) resort the estimation and creation of provisions for litigations when they deal with this kind of situations. Moreover, 10% do not follow the evolution of these litigations and if an essential change occurs between the closure date of the financial year and the date when the annual financial statements are subduced for approval to the Annual General Meeting, they do not consider it as “an event subsequent to the date of the balance sheet requiring accounting adjustments”. Less than a quarter of those interviewed evaluate the asset sampled in financial leasing (the case of the lessor) at the value of the minimal leasing payments, the rest of them considering the equitable value, the cost or the minimum between the equitable value and the

value of the leasing payments more appropriate. The following 6 questions concern the inventory accounting policy. Three quarters of the analyzed enterprises prefer the perpetual inventory method as an accounting method used for the stock valuation, 8.33% intermittent inventory and 13.33% use the mixed method, according to the following figure:



(Source: authors' calculus)

Figure 3. The distribution of answers in the sample regarding the accounting method used for inventory valuation

The organization of inventories is made according to the quantitative-value method for raw materials, consumables, finished goods and other inventory goods. The global-value method is used for merchandise. Only 78.33% of the respondents agree with this provision, the same percentage being recorded also in the case of acknowledging in the profit and loss account of the period of the loss from the depreciation of the hardly marketable stocks when re-evaluating them (see Table 4.).

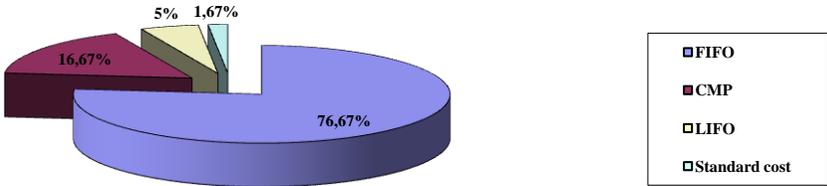
Table 4. The distribution of answers regarding the accounting policy of inventory in the sample

Nature of problem investigated \ Answers	Correct	Vague	Incorrect	Total
The use of quantitativ-value and global-value methods for the organization of inventory management	78.33%	8.34%	13.33%	100%
Re-evaluation of hardly marketable inventories and acknowledgement of loss from their depreciation in the profit and loss account of the period	78.33%	8.34%	13.33%	100%
Evaluation and presentation of inventories in the balance sheet	16.67%	0%	83.33%	100%

(Source: authors' calculus)

A very small percentage (16.67%) of the total of practitioner accountants answering this interview are aware of the fact that inventories are evaluated and presented in the balance sheet at the smallest value between the cost and the net achievable value, the rest choosing either the first value or the second one. 63.33% of the entities organize internal control procedures of inventories, on each category. More than three quarters of the respondents evaluate the

indistinguishable inventories by using FIFO method, the rest use the other methods in accordance with the percentages in the following figure:



(Source: authors' calculus)

Figure 5. The distribution of answers in the sample regarding the evaluation method of inventories

The last 5 questions are the object of accounting policies regarding the accounts receivable, income and expenditure. Only 76.67% of those interviewed agree that short term accounts receivable are evaluated at their nominal value, on the date of their occurrence, periodical updates not being necessary anymore. The long term accounts receivable are emphasised at the updated value, in accordance with an average rate of the inter-banking interest, an exchange rate or in accordance with the graph of collections staging. A significant percentage (20%) does not agree with these regulations. From the table below, it results another unsatisfying aspect, the fact that there are respondents (36.67%) who do not consider that for the clients who have not paid for more than 60 days, adjustments for depreciation are required. Also, all the accounts receivable whose age of bad payment is more than 90 days are uncertain accounts receivable and will be presented as such, with the presentation in the explanatory notes of the professional judgment applied and those particular clients will be prosecuted.

Table 6. The distribution of answers regarding the accounting policy of accounts receivable, debts, income and expenditure in the sample

Nature of problem investigated	Answers	Correct	Vague	Incorrect	Total
Evaluation of short term accounts receivable at their nominal value and of long term accounts receivable at their updated value		76.67%	3.33%	20%	100%
Setting up adjustments for depreciation, for the accounts receivable which have not been cashed in 60 days and those outrunning 90 days are uncertain accounts receivable and these particular clients will be prosecuted		63.33%	0%	36.67%	100%
Evaluation of accounts receivable and foreign currency debts by acknowledging the income or expenditure from the differences		95%	1.67%	3.33%	100%

Nature of problem investigated	Answers	Correct	Vague	Incorrect	Total
in the exchange rate					
Adjustment of income and expenditure entailed of fundamental errors		95%	3.33%	1.67%	100%

(Source: authors' calculus)

It is rejoicing the fact that regarding the evaluation at the end of each month of the accounts receivable and foreign currency debts and of the accounts receivable and debts expressed in lei, whose settlement is made according to a foreign currency's exchange rate, 95% agreed (60% strongly agree and 35% agree) that this is made in accordance with the exchange rate of the foreign currency market, communicated by the National Bank of Romania on the last banking day of the month in discussion. The recorded exchange rate differences are showed in accounting in the expenditure or income from the exchange rate differences or other financial income or other financial expenditure, may be the case. The situation is similar in the case of correction policy of fundamental errors observed in income or expenditure. If the errors are afferent to a period of current year, they will be corrected in the period in which the error is discovered. If the error is discovered in the following years, its correction will not affect anymore the income or expenditure accounts but the result account reported from corrections of fundamental errors and changes in the accounting policies. Regarding the drawing up of cash-flow statements, 48.33% of the SMEs in the sample state that they carry out this statement, while 51.67% do not carry out this document.

5. Conclusions, limits and future research

As we presented in the previous sections, our study is a questionnaire based research, applied on a sample formed by 100 SMEs from Bihor county, selected using size, annual turnover at the end of 2008 as well as the average number of employees criteria. Only 83 of the applied questionnaires were validated. It is important to note that 65 of the respondents have over 5 years experience in preparing financial reports, that is over 85% of the sample, the others have an experience of 1 to 5 years, in the meantime, 44% of the respondents have economic higher education and other 44% are chartered accountants. The most interesting results were obtained from the answers to the questions from the second section of the questionnaire. Our attention was focused on the 24 questions in the second part of the questionnaire, those regarding the enterprise specific accounting policies, as they are provided in Order 3055/2009. The first 3 questions tackle the problem of presenting the accounting information in the financial statements and only 93.33% of the respondents agree that the elements presented in the annual financial statements of the entity are evaluated in accordance with the general accounting principles stipulated in Order 3055/2009, according to the accrual accounting. Half of the people interviewed had in view all four qualities of the accounting information (intelligibility, relevance, credibility, comparability) in drawing up the annual financial statements, and most of them (56.67%) are not aware of the possibility to use a significance threshold (10%-15%) of the total value of that particular category of assets, liabilities, expenditure, income and results for an as faithful as possible presentation of the information in the balance sheet and in the profit and loss account.

Out of 83 people interviewed, only 53.33% are aware of the fact that when entering into management the purchased tangible assets are evaluated at the purchase cost and 3.33% are not aware or have a vague opinion about the fact that the depreciation policy is based on the detailed depreciations periods used for each tangible asset and the depreciation methods correspond to the manner in which these tangible assets are used and they start producing effects the moment they

are used. As a depreciation accounting method used to recover the input value of the tangible assets, 95% of the entities prefer the linear method, 1.67% use only the accelerated method and the rest apply the accelerated method for machinery and means of transport and the linear method for the rest of the tangible assets. As regards accounting policy of inventories three quarters of the analysed enterprises prefer the perpetual inventory method as an accounting method used for the stock valuation, 8.33% intermittent inventory and 13.33% use the mixed method. A very small percentage (16.67%) of the total of practitioner accountants answering this interview are aware of the fact that inventories are evaluated and presented in the balance sheet at the smallest value between the cost and the net achievable value, the rest choosing either the first value or the second one. 63.33% of the entities organize internal control procedures of inventories, on each category. More than three quarters of the respondents evaluate the indistinguishable inventories by using FIFO method, the rest use the other methods.

Finally, only 76.67% of those interviewed agree that short term accounts receivable are evaluated at their nominal value, on the date of their occurrence, periodical updates not being necessary anymore. The long term accounts receivable are emphasized at the updated value, in accordance with an average rate of the inter-banking interest, an exchange rate or in accordance with the graph of collections staging. A significant percentage (20%) does not agree with these regulations. Cash-flow statements, only for 48.33% of SMEs in the sample is relevant to be completed, while 51.67% do not carry out this document. The main result of our investigative research on the SMEs from Bihor county sample is the identification of the need of specialists' training in the development of specific accounting policies, according to the entity's features, as well as the necessity of specialized assistance in the elaboration of a policy and procedure manual(guide) for the accounting department, which should comprise the specific theoretical framework for the development of strong accounting policies, premise of a believable and comparable financial reports, reflecting the economic substance of events and transactions. The limits of our study are related especially to the elaboration of the questionnaire, the formulation of the questions as well as the choice of the sample. Future research will be centered on the investigation of specific accounting policies used in the region of North West Romanian SMEs, their presentation in the financial reports and the motivations behind the choose of an accounting policy or method in the detriment of another one.

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THE TYPOLOGY OF REGIONAL MERGERS FROM THE PERSPECTIVE OF FINANCIAL-ACCOUNTING ASPECTS

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The interest for approaching this paper is determined by the actuality of the theme concerning mergers, and also by the scale proportions this type of transactions have arrived at, both at global level and also at national level, everything having as cornerstone a market economy within which competitiveness plays a more and more important role. The aim of the study consists in analyzing the external restructuring of entities under the form of mergers. On one side, in order to clarify and deepen the theoretical aspects concerning mergers, and on the other side, in order to identify certain features related to merger transactions in Cluj County. The aim of the study is to identify the conditions and manner of merger development within commercial entities from Cluj County and to establish a typology relying on the results concerning the relationship between the entities' shareholding structure, their contribution and the exchange ratio when performing the transactions. The actuality of the theme, the requirement and the increasing manifestation of the merger phenomenon also within the Romanian territory, the necessity of a thorough analysis of merger trends and typologies, they all have been trigger factors of this objective. In order to achieve the objective a research methodology was followed, assumptions were made, which have been confirmed or infirmed. The methodological sphere consists of an approach of considered quantitative and qualitative models, of techniques for data collection, hypotheses testing, but also of research boundaries. As a result of the processing and analysis of the data on which this study relies, one arrived to the following conclusions concerning mergers that were performed in Cluj County, conclusions which could lead to the elaboration of a typology for the mergers that have occurred in this region: in terms of shareholding structure, the two entities usually had a joint majority shareholder, and regarding the financial aspects, the contributions of both entities are in most of the cases positive, and the contribution of the absorbent entity is greater, and rarely, when the contributions are negative, these contributions usually belong to the absorbed entity. Also, when the shareholding structure is the same, the exchange ratio is usually 1:1.

Key words: merger, contribution, exchange ratio, positive equity, negative equity

JEL CODE: Accounting and Auditing: General M40; Mergers; Acquisitions; Restructuring; Voting; Proxy Contests; Corporate Governance G34

I. Introduction

The actuality and importance of merger as a restructuring form underlie the approach and analysis of this paper. The aim of the study is to identify the conditions and manner of merger development within commercial entities from Cluj County, and mainly to identify the typology of developed mergers from the perspective of previous bonds and of the contributions within the transaction. The main objective consists in obtaining certain results and also in establishing certain correlations concerning: the existent connections between the entities participant at the merger, respectively the connections between entities regarding shareholding structure and their contributions. In order to obtain the results the following three stages have been gone through: obtain the data, formulate the hypotheses and verify them. The first stage of the study concerning

the analysis of the entities participant at the merger consisted in collecting, processing and centralizing the data taken from the merger projects published within the Official Journal of Romania, part IV, and also the financial situations of the entities, published by the Ministry of Finance. The so obtained data have been centralized and encoded in worksheets, by means of SPSS statistical software, version 11. The second stage consisted in formulating the hypotheses relying on the legal provisions in force regarding the legal regime of mergers according to the Law no. 31/1990 concerning companies, with the subsequent modifications and additions of the Law no. 26/1990 concerning the Court of Registration, republished. On one hand, we took into account the identification elements of the entities involved in merger (entities' denomination, legal form, main object of activity according to NACE and founding year), and on the other hand, the financial elements (evaluation method, the value the transaction relied on, exchange ratio, merger premium). The third stage of the study consisted in finding solutions for the hypotheses formulated within the previous stage, using the instruments of descriptive statistics.

II. Research methodology

The methodological sphere consists of an approach of the considered quantitative and qualitative models, of techniques for data collection, hypotheses testing, but also of research boundaries. The quantitative and qualitative methods used are meant to analyze the experience for cognition, these methods being the most frequently approached within the field of economic sciences.

The quantitative data have been collected from the publications made within the Official Journal of Romania, part IV, being selected the entities which have performed merger operations in Cluj County, and also from the data collected from the financial situations published by the Ministry of Finance. The qualitative data were obtained by means of observation method and analysis, taking into account the fundamental criteria of research hypotheses. Both quantitative and qualitative data have been encoded and centralized in worksheets. The sample representing the object of this study consists of 103 commercial entities from Cluj County. The advantage of the study is that the collected data rely on public information, but it also involves certain boundaries derived from insufficiently detailed information. Even though the data collected from the publications furnished by the Official Journal have been substantially supplemented with those offered by the Ministry of Finance, some information remained incomplete. The cause of these boundaries can be attributed to the fact that merger projects are elaborated by the administrators of the participant entities or on their liability, and in most of the cases they do not have the necessary economic and legal knowledge to elaborate this sort of projects. Regarding the processing and the statistical analysis of data, we used the SPSS statistical software version 11 for encoding and centralizing the data, which were subjected to certain processing in order to establish correlations between variables, the influence degree of certain variables on others, all in order to obtain information as closer to practical reality as possible and to find solutions for the hypotheses.

III. Hypotheses' formulation and demonstration

Hypothesis 1

In most cases, the merger occurs between entities with the same shareholding structure or between entities with the same majority shareholder or when the absorbent entity possesses the absorbed entity in proportion of 100%.

Demonstration: The shareholding structure plays a decisive role when performing a merger, given the fact that a certain structure of the shareholding allows significant modifications within the development of the merger transaction. This position of the shareholding, of key element within the merger process, is prefigured in Law 31/1990, which states within the article 115, par. 2 that: "the decision to perform merger shall be taken by a majority consisting of at least two

thirds of the rights to vote possessed by the present shareholders or representatives”. Another limitation may exist for the condition of majority shareholder, which is that imposed by the legislator in order to protect thirds parties, limitation which offers them the power to suspend the merger’s development. The formulation of this hypothesis has its origins in the trend manifested on the Romanian territory of taking control by means of successive acquisitions of shares, followed by the merger operation after a certain period of time. It is important to mention here, the example of Astral Company, which had performed such an action for a long period of time.

Hypothesis 2

When participating at an absorption-type merger, the most common case is that in which the absorbent entity has the greater contribution.

Demonstration:. We chose this hypothesis relying on the fact that the absorbent entity has, at the same time, a greater economic and financial power, which in most cases bestows this position. The economic and financial power is strongly related to the global value of an entity, which represents the entity’s contribution within the merger. Therefore, a greater power would imply a greater contribution (and the other way around).

Hypothesis 3

In most cases, the contribution of the absorbent entity is positive, and the contribution of the absorbed entity is negative. If, within the merger operation, there are both positive and negative contributions, the negative ones belong to the absorbed entity, and the positive ones to the absorbent entity.

Demonstration: This hypothesis represents another consequence of the argument presented at the previous hypothesis, in other words, it is a sequel and depth of that certain hypothesis. In addition we can mention that, in most cases, the companies decide to merge and to be absorbed when they are in an unfavorable situation from an economic, financial or profitability perspective.

Hypothesis 4

If the merger contribution of the absorbed entity is negative, the merger occurs only if between the absorbed and absorbent entities there is a relation concerning the shareholding.

Demonstration: When the decision to perform a merger is made, the agreement must be consented by all the entities which participate to the merger. Every merger involves dealing with certain risks, both by the participant entities and their shareholders/associates. Absorbing an entity with negative contribution (which may indicate major financial difficulties) obviously involves a higher risk, which can be accepted easier when between the entities there is a relation concerning the shareholding. We consider that the takeover of a negative net merger contribution by the absorbent entity does not affect the participation rate to the capital of the shareholders/associates of the entity resulted after merger, given the fact that they are also shareholders of the absorbed entity.

Hypothesis 5

In most cases, the 1:1 exchange ratio is determined only when the merger occurs between entities with the same shareholding structure.

Demonstration: The financial evaluation is the support when establishing the exchange ratio, the central elements of negotiation. Talking about negotiation, it is not compulsory for this exchange ratio to be established taking into consideration the mathematically determined values; it can also be a 1:1 exchange ratio, namely, a share from the company that makes the contribution gives the right to a share within the company that benefits from the contribution or this contribution can be

established by agreement between the participants. Therefore, basically, the exchange ratio can be both objective and conventional. When the entities that participate to the merger have the same structure of the shareholding (are possessed by the same legal persons/individulas) the calculation of a exchange ratio is not justified. When the absorbent entity possesses 100% of the absorbed entity, the merger operation is strictly a substitution of financial assets with the merger contribution made by the absorbed entity, and from the structure perspective, the capital of the absorbent entity does not suffer modifications, in this case the exchange ratio is not justified. The social capital of the absorbent entity does not increase with the social capital of the absorbed entity, but the shares possessed by the absorbent entity are annulled. Therefore, we consider that in order for a 1:1 exchange ratio to exist, the entities should have the same structure of the shareholding.

IV. Results, processing and interpretations

Hypothesis 1 (Table 1: Structure of the shareholding)

Shareholding structure				
Type of structure	Name	Absol values	No. of answers	No. of cases
Independent	STRCTIND	9	11,3	12,7
Same structure	STRCTACE	20	25,0	28,2
Joint majority shareholder	STRCTACT	31	38,8	43,7
The absorbent owns 100% of the absorbed	STRCTABN	6	7,5	8,5
The absorbent owns shares within The absorbed	STRCTNPR	14	17,5	19,7
Total answers		80	100,0	112,7
3 missing cases; 71 valid cases				

(Made by authors)

After processing the data one can observe that, in Cluj County, the relation between the entities concerning the shareholding structure is as it follows: in most cases, the companies have a joint majority shareholder (43.7% from the considered types of structure), have the same structure (28.2%) or the absorbent owns shares within the absorbed company (19.7%). Regarding this hypothesis, we must mention that an entity can have one or multiple types of shareholding structures from the above mentioned list. *Hypothesis 1 : partially confirmed*

Hypothesis 2 (Table 2: The contribution of the absorbent)

The contribution of the absorbent (greater/smaller)

	Frequency	Percentage	Valid percentage
smaller	18	24.3	26.5
greater	50	67.6	73.5
Total	68	91.9	100.0
Missing	6	8.1	
Total	74	100.0	

(Made by authors)

By analyzing the frequency table, we can observe that for most of the entities that merged, the absorbent has the greater contribution, in 74% of the entities from Cluj County that offered this information. For the remaining 26% of the entities, the absorbent has a smaller contribution than the contribution of the absorbed entity. *Hypothesis 2: confirmed*

Hypothesis 3 (Table 3: Type of contribution)

The status of the entity within merger*Type of contribution

			Type of contribution		Total
			positive	negative	
Status of the entity within merger	Absorbent	Absolute value	21	3	24
		% from the entity's status	87.5%	12.5%	100.0%
		% from total	30.0%	4.3%	34.3%
	Absorbed	Absolute value	35	11	46
		% from the entity's status	76.1%	23.9%	100.0%
		% from total	50.0%	15.7%	65.7%
Total		Absolute value	56	14	70
		% from the entity's status	80.0%	20.0%	100.0%
		% from total	80.0%	20.0%	100.0%

(Made by authors)

From the 70 entities that furnished the necessary information for demonstrating this hypothesis, 80% had a positive contribution and 20% a negative one. From the 20% of the entities with negative contribution, 15.7% were absorbed and 4.3% absorbent. And from the 80% of the entities with positive contribution, 50% were absorbed and 30% absorbent. The proportion of negative contribution is greater at the absorbed entity (23.9%) compared to the absorbent (12.5%). *In conclusion*, in most cases, the entities (irrespective of their status of absorbent or absorbed), had a positive contribution. However, the proportion of negative contribution at absorbed entities is greater than in the case of absorbent entities, therefore, it is more likely the negative contribution to belong to the absorbed entity. **Hypothesis 3: partially confirmed**

Hypothesis 4

For the entities from Cluj County that had performed merger, this hypothesis was not confirmed. The statistical processing furnished the following results:

The negative contribution occurred both when there was a relation between the entities concerning the shareholding, and when the entities were independent. The negative contribution occurred in the following cases of shareholding structures: independent, joint majority shareholder, the absorbent owns shares within the absorbed. The other cases were not registered within the considered entities. As we mentioned within other demonstrations of hypotheses, in most of the cases the contributions were positive, irrespective of the shareholding structure.

Hypothesis 4 : unconfirmed (Table 4: The negative contribution of the absorbed entity when there is a relation concerning the shareholding)

Independent*Type of contribution

			Type of contribution		Total
			positive	negative	
Independent	No	Absolute value	48	10	58
		% from Total	71.6%	14.9%	86.6%
	Yes	Absolute value	5	4	9
		% from Total	7.5%	6.0%	13.4%
Total		Absolute value	53	14	67
		% from Total	79.1%	20.9%	100.0%

The same structure*Type of contribution

			Type of contribution		Total
			positive	negative	
The same structure	No	Absolute value	33	14	47
		% from Total	49.3%	20.9%	70.1%
	Yes	Absolute value	20		20
		% from Total	29.9%		29.9%

Total	Absolute value % from Total	53 79.1%	14 20.9%	67 100.0%
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Joint majority shareholder

			Type of contribution		Total
			positive	negative	
Joint majority shareholder	No	Absolute value % from Total	34 50.7%	5 7.5%	39 58.2%
	Yes	Absolute value % from Total	19 28.4%	9 13.4%	28 41.8%
Total		Absolute value % from Total	53 79.1%	14 20.9%	67 100.0%

The absorbent owns 100% of the absorbed

			Type of contribution		Total
			positive	negative	
The absorbent owns 100% of the absorbed	No	Absolute value % from Total	48 71.6%	14 20.9%	62 92.5%
	Yes	Absolute value % from Total	5 7.5%		5 7.5%
Total		Absolute value % from Total	53 79.1%	14 20.9%	67 100.0%

The absorbent owns shares within the absorbed

			Type of contribution		Total
			positive	negative	
The absorbent owns shares within the absorbed	No	Absolute value % from Total	44 65.7%	10 14.9%	54 80.6%
	Yes	Absolute value % from Total	9 13.4%	4 6.0%	13 19.4%
Total		Absolute value % from Total	53 79.1%	14 20.9%	67 100.0%

(Made by authors)

Hypothesis 5 (Table 5: The 1:1 exchange ratio and the shareholding structure)

Independent*Exchange ratio

			Exchange ratio		Total
			mathematic	Without ratio or unspecified	
Independent	yes	Absolute value	4	5	9
		% from the Independent	44.4%	55.6%	100.0%
		% from Total	5.6%	7.0%	12.7%

The same structure*Exchange ratio

			Exchange ratio			Total
			negotiated	1:1	mathematic	
The same structure	yes	Absolute value	3	15	2	20
		% from the Same structure	15.0%	75.0%	10.0%	100.0%
		% from Total	4.2%	21.1%	2.8%	28.2%

Joint majority shareholder*Exchange ratio						
			Exchange ratio			Total
			negotiated	1:1	mathematic	
Joint majority shareholder	yes	Absolute value	7	10	14	31
		% from the Joint majority shareholder	22.6%	32.3%	45.2%	100.0%
		% from Total	9.9%	14.1%	19.7%	43.7%
The absorbent owns 100% of the absorbed*Exchange ratio						
			Exchange ratio			Total
			negotiated	mathematic	without ratio or unspecified	
The absorbent owns 100% of the absorbed	yes	Absolute value	2	2	2	6
		% from The absorbent owns 100% of the absorbed	33.3%	33.3%	33.3%	100.0%
		% from Total	2.8%	2.8%	2.8%	8.5%
The absorbent owns shares within the absorbed*Exchange ratio						
			Exchange ratio			Total
			negotiated	1:1	mathematic	
The absorbent owns shares within the absorbed	yes	Absolute value	2	2	10	14
		% from the Absorbent owns shares within the absorbed	14.3%	14.3%	71.4%	100.0%
		% from Total	2.8%	2.8%	14.1%	19.7%
(Made by authors)						

For the entities from Cluj County, the processing indicates that the 1:1 exchange ratio occurs with the highest proportion (75% from all the types of ratios, for that certain structure of shareholding) when within the entities there is the same shareholding structure. Moreover, this 1:1 exchange ratio also occurs within the other shareholding structures, as it follows: for “joint majority shareholder” in proportion of 32.3% from all types of ratios, and for “the absorbent owns shares within the absorbed” in proportion of 14.3%. The exchange ratio does not exist when the companies that participate to the merger are independent, from the shareholding structure’s perspective. *In conclusion*, the 1:1 exchange ratio mostly occurs when there is the same shareholding structure; it also occurs in other shareholding structures, but it does not exist in the case of independent entities. ***Hypothesis 5: partially confirmed***

V. Conclusions

The merger by means of absorption remains the most complex operation, especially when between the participant entities there are connections before the merger occurs. Within this type of merger, when establishing the value of the contribution brought by the participant entities, three special situations are identified:

a) **the absorbent company has positive equity, and the absorbed company has negative equity**; in this situation there is no exchange ratio, and the absorbent entity will not issue shares in order to remunerate the contribution of the absorbed entity. We consider that a situation of this kind can occur when between the absorbent and the absorbed there are previous connections, namely the absorbed is owned by the absorbent or the entities that merge have a joint majority shareholder or they have the same shareholding structure. The absorbent entity will approve to takeover a negative contribution if it considers that the contribution of the absorbed entity will

lead to increase the performances subsequent to the merger operation. Regarding the accounting reflection, the patrimonial asset and liability elements are transferred between the two entities, and the difference between the asset and liability elements of the absorbed entity at the moment of the takeover within the absorbent's accounting shall be reflected within the result, but within the result of previous financial years.

b) the absorbent company has negative equity, and the absorbed company has positive equity; if the absorbent entity has a negative net contribution, in order to determine the exchange ratio, one will consider the nominal value of a share in order to establish the number of shares the absorbent entity has to issue for remunerating the absorbed entity's contribution, according to the example of accounting reflection of operations concerning the Order 1376/2004. We consider that, in this case, the shareholders/associates of the absorbed entity are affected by this kind of exchange ratio. Therefore, we believe that, in order to simplify the situation, the entities should consider a reverse operation, basically the absorbent entity should be the entity with the highest merger contribution, and in order to determine a fair exchange ratio, it could be a conventional ratio, negotiated between participants.

c) both the absorbent and the absorbed companies have negative equity. When both participant entities have negative contributions, we consider that an exchange ratio cannot be determined. Therefore, the operation relies on negotiation between parties; basically the patrimonies of the two entities merge in terms of a conventional exchange ratio or without share issuance by the absorbent entity.

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CURRENT STATE AND EVOLUTION PERSPECTIVES FOR MANAGEMENT ACCOUNTING IN THE ENERGY SECTOR BY IMPLEMENTING THE ABC METHOD

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*Based on a controversial issue, namely determining and controlling costs in the energy sector, the present study falls within the scope of management accounting and control. This scientific approach was initiated as a result of personal research concerns in the area of accounting, starting from the need to know and quantify costs in a sector of the economy that is less exploited. The main objective of this scientific approach is to address the evolution of the energy sector in a national and international context, in terms of economy and finances, with the aim to underline the need to organize and conduct management accounting in this sector. We will present a few particularities of the energy system, the current status of implementation of a medium and long term strategy aimed at developing the energy sector, as well as the need to adopt modern costing methods in this sector, which ensure operative cost control and performance growth of the entities that operate in this sector. Information on the reviewed topic was conducted by studying the national and international literature in the field, by analyzing the associated legislation, by consulting specialized web-sites and various articles in the database. The main research methods used in this scientific approach were **analysis** and **synthesis**, and qualitative research was the type of used research. The results of the research will materialize in providing the necessary conditions for designing an econometric model for implementing the ABC method, the conceptual and ideological delimitation of the ABC method, the deepening of the positive and negative aspects that the implementation of the Activity Based Costing involves. The major implication for the researched field is ensuring success for the implementation of a modern costing method in the energy sector, underlining the shortcomings of the traditional costing methods. The added value of the paper consists in conducting a rigorous study of the current state of an overlooked sector of global economy and shaping trends in the evolution of energy costing.*

Keywords: energy sector, strategy, costing method, activities, operative control

JEL classification: M40, M41

1.Introduction

The purposes of this research are to study, present and adopt a modern costing method for production in the energy sector, starting from the specific of the entities that operate in this sector. The characteristics of the energy sector, such as: extended periods of implementation for various sectorial policies, achieving strategic objectives, the large capital requested for the development of this sector, the need to achieve production at the same time with consumption, and others, require the existence of **medium and long term strategies** aimed at developing the energy sector. These characteristics require organizing and conducting an efficient management accounting in terms of costs.

To achieve this goal, we will propose the implementation of the ABC method (Activity Based Costing) whose targets include: revealing the causes that lead to choosing the activity based costing method; the reorganisation in cross-section of the entities where the method will be implemented by taking into account the organizational and technological features of the

production in the energy sector; developing the account system used to reflect consumption and activity costs, which is specific for entities in the energy sector; drafting specific documents that match the needs of evidence, analysis and control, and highlighting the links between them; the contribution of the activity based costing method to the development of the methodological and informational support in entities from the energy sector.

2.The energy sector in national and international context

Energy represents an indispensable product, having high economic, social, strategic and political value. The general objective of any implemented strategy in the global energy sector consists in meeting the energy needs both now and on the medium and long term, at an appropriate price for the modern market economy and complying with a good living standard, in conditions of quality and safety of power supply, but especially by complying with principles of sustainable development.

Forecasts indicate an economic growth that will generate increased energy consumption. In the context of these evolutions, it is estimated that the total energy demand for 2030 will be higher by 50% than in 2003, and the demand for oil will increase by 46%. Other equally gloomy previsions refer to the global oil reserves that could last until 2040 at the current rate of consumption, natural gas reserves would ensure consumption until 2070, while coal reserves are ensured for the next 200 years.

The International Energy Agency (IEA) and the World Energy Council (WEC) claim that for the next decade, the primary energy consumption structure will see an increase of the share of renewable sources, but also of natural gases. Furthermore, it is estimated that a quarter of the primary energy needs will still be covered by coal.

The lack of refining capacities, the tendency of some countries to increase their energy stocks in order to cope with the crisis, the increase of the energy demand combined with geopolitical factors have determined the growth of crude-oil prices, which further determined a increase of prices for natural gases. All these factors led to the reorientation of energy policies in countries that import energy, in terms of increasing focus on renewable energy sources and improving energy efficiency.

In modern times, Europe was the true centre of the world. It was the continent which was always at the helm of the development process.

The energy sector represents, at EU level, a major economic and geopolitical factor. EU is the second energy market in the world. Currently, it imports over 70% of its oil and almost 45% of its gas, and this dependency could reach 90% for natural gases and almost 100% for oil by 2030.

Although the European Union has tried to reduce energy consumption and to promote renewable energy, its dependency to global suppliers of fossil fuels is increasing. EU is the world's largest importer of energy and the second consumer, being dependent on gas supplies from Russia (24%), Norway (15%) and Algeria (11%). While the energy consumption of European Union members is going upward, it is estimated that by 2015 only 30% of the need for natural gases will be covered from own sources.

In order to ensure energy sustainability, competitiveness and security, the European energy strategy project, called **A European Strategy for Sustainable, Competitive and Secure Energy**, establishes the main courses of action for the European Union:

- diversity of energy sources;
- strengthening solidarity between member states and ensuring the energy flow by revising the legislation regarding national gas and oil stocks;
- developing a joint external policy for all the EU states and building a protection infrastructure of the energy system.

Romania, a member of the European Union, is in a particular situation. Because the energy sector represents the main contributor to environmental pollution and climate changes, our country must meet a double requirement: on one hand, the high standards of the European Union regarding energy and its impact on the environment, and, on the other hand, Romania has to correct its own deficiencies in the energy sector.

Because it is a member of the European Union, our country has to comply with the **Integrated strategy on energy and climate changes**, adopted in March 2007 by EU, which had the strategic objective to reduce emissions of greenhouse gases (especially CO₂) by 20% by the year 2020, taking into account the limitation of the global warming effect to only 2 Celsius degrees more than the temperatures in the preindustrial age (the energy sector contributed with 80% to the total volume of emissions). Another target of the European Union was to reduce energy consumption by increasing energy efficiency by 20% by the year 2020.

Romania *“has a wide range of primary energy resources, but they are reduced in quantity: crude-oil, natural gases, coal, uranium ore, as well as an important potential of renewable energy that may be capitalized”*

(Official Gazette of Romania 2007: 4).

The priorities of the energy industry in our country involve *energy efficiency* (the Romanian energy industry is the most energy-intensive in the European Union, with a potential to reduce energy losses of about 30-35% of consumed primary resources, half of them being imported), *cogeneration and district heating* (approximately 70 towns in our countries need modernization, because the total energy losses in urban systems are high), *the energy production capacities are old and unreliable*.

In addressing the development of the energy sector, in Romania was considered the need to create structures that will adapt to the sole European market, where national markets gradually lose their traditional borders and become an integrated part of the common market.

In conclusion, improving legislation in the field, modernizing and privatizing the production sector, improving the electric energy markets, electrifying the rural area, reducing environmental pollution, stimulating research, bringing development and innovation in the field are only a few important priorities of the energy sector in our country.

Starting from the expression “energy is not expensive, but its lack is”, we may state that in Romania the following decades will be dominated by the challenges of developing an energy efficient and competitive economy, with low carbon emissions and energy security.

3. Research methodology

Information on the reviewed topic was achieved by studying national and international literature in the field, by analyzing the associated legislation, by consulting specialized web-sites and various articles in the database. The main research methods used in my scientific approach were *analysis* and *synthesis*, and qualitative research was the type of used research.

4. The need to organize management accounting in the energy sector

The managerial information is used by the management factors of the economic entity as a product of management accounting. Sometimes, *“the information is credible, but irrelevant. Other times, it is relevant, but it’s not credible. In both cases, it is not useful”*(Briciu et al. 2009: 12).

Being regarded as a *“specific method of processing accounting information”*(Pântea and Bodea 2008: 16) management accounting aims to know the costs of various functions of the entity, to ensure the assessment basis for its produced goods, to explain the obtained results and to establish forecasts. Reaching all these objectives requires the adoption of a proper costing method.

The main dysfunctional elements that characterize the energy sector in our country are related to: energy prices, which are kept low for reasons of social protection; high energy losses on the entire stream, from primary resources to energy use; maintaining state property in the production sector, with multiple adverse economic consequences; old and inefficient equipments that need high investments; an unstable and unattractive legal framework; high level of pollution, etc.

In terms of accounting, one of the pressing needs in this system is organizing and conducting a management accounting by implementing modern costing methods, capable to facilitate the calculus of performance.

The permanent evolution of the global business environment has generated the permanent adaptation of management accounting to current requirements. The evolution perspectives of these two has manifested under the mark of being open to change, this being one of the most important features that globalization has brought to management accounting and control.

In the context of macroeconomic phenomena, such as: stagnation of economic activity, increased global competition, inflation and environmental turbulences that considerably increased the vulnerability of entities, management accounting and control are forced to intervene to enable work in optimum conditions and operational decisions. Reducing this vulnerability may be achieved by increasing the reaction of the entity through the implementation of an information system capable to signal these “dangers”, but also by improving the entity’s competitiveness through the adoption of a reliable information system.

Starting with the 1990s, the issues of management accounting and costing have started to be approached separately, the basic approach being “*a costing method like full costing, doubled by a booking technique specific for accounting, using Class 9 of accounts – Management Accounts – stipulated in the regulations issued by the Ministry of Public Finance*”(Dumitru and Calu: 31). Over the next two decades, in Romania, the issue of management control has started to take shape in close relation to management accounting. The more prominent manifestation of the role of management accounting as an information tool of management has led to adopting and using on a wider scale the notion of management accounting.

Currently, there are a number of factors that influence the organization forms of management accounting. These factors are numerous and are related to the specific of the technological process, to the functional and operational structures of the entity, to the full or partial interference of the management accounting’s objectives in assisting the decision-making process, to the flexibility or rigidity of using one or another system of accounts to reach these objectives.

Under the influence of these factors, the specialized literature shaped two models of organization of management accounting (a dualistic model and an integrated model) that resulted in four organization concepts for management accounting (the concept of single-entry bookkeeping, the integral organization concept, the dualistic concept and the modern concept of organizing management accounting). **The basic components** of management accounting organization are: “*costing, budgeting and conducting a rigorous budgetary control, writing reports of internal information necessary in assisting the decision-making process, the control of activities and performances of the entity based on the concept of efficiency of the responsibility centres within the entity*”(Fătăcean 2009: 43).

The delimitation of these components is associated with clipping the entity into responsibility centres. The cross-clipping of the entity complies with the logic of purpose and cooperation in order to describe the object of the actions that are determined internally for the organization process. This new way of practical organization achieves the connection between strategic objectives and their materialization into actions, “*the clipping of the enterprise, seen as an accounting entity, into analysis centres that are considered accounting sub-units is the most important stage in implementing a costing system, upon which the reality, accuracy and*

exactness of the registered information supplied by management accounting depends”(Pântea and al. 1993: 64).

5. Adopting Activity Based Costing in the energy sector

Management accounting as an end in itself has the obligation to meet the informational requirements enunciated by the managers of the entity, but satisfying these requirements depends on the chosen calculation method and on the percentage at which this method is orientated or not towards the principle of efficient management of the activity.

In terms of costs, the efficiency of the information become essential for the efficiency of the production process because any information that is not useful on time will lose ground and its use value, and therefore, the work consumption necessary to obtain it is wasted. The goal of applying the activity based costing method is to enable reception of efficient information, efficiency that should reach a point where any unsaved expense will be tracked down before it even occurs.

Activity based costing represents one of the latest advancements in the area of costing.

“The origin of the activity based costing method is found in US literature in the paper *“The Hidden Factory”* written by Jeffrey G. Miller and Thomas E. Vollman, which subjects to critical analysis the sectors generating indirect costs”(Caraiani and Dumitru 2005: 225). The two authors have examined with great accuracy the places where indirect costs occur, concluding that it is very important to assign a decisive role within cost control to the development of a more detailed model for the causes of these costs. They didn’t insist on creating a new system for determining costs, but they insisted only on detailing the occurrence of indirect costs and the measures that should be taken when clarifying the causes that contributed to the recording of negative deviations of indirect costs.

Applying the ABC method in the energy sector provides enhancement of the classification of costs not only in terms of their economic nature, but especially in terms of destination, and creates bigger analysis opportunities on three categories of activities: production, transport and supply.

Accounting of environmental costs may be partially considered as a special application of the ABC method. It is successfully applied to monitor the use and allocation of material, financial and energy resources based on the life cycle of the products. *“Applying the ABC method to determine environmental costs requires identifying the costs related to the environment that are normally attributed to the common centres, which involve environmental costs, and the environmental costs hidden in indirect costs”*(Bețianu 2008: 350).

Activity based costing represents only one of the ways in which environmental management accounting is integrated into the business. One of the major advantages of using the ABC method to assess environmental costs is that it may be used to integrate environmental costs within the strategic management process, thereby incorporating environmental issues within the strategic objectives of the entity’s life.

The ABC method is not limited to providing more relevant and accurate informational costs than traditional approaches. In this new approach, costing is still considered a significant management tool, but isn’t an end in itself. The aim isn’t to influence the level of costs (such as the cost method of cost centres) but rather to allocate an efficient action on activities, which determines costs. *“People can’t manage costs, they can only manage the activities that determine costs”* (H.T. Johnson). Therefore, a new dimension was given to the ABC method: Activity Based Management (ABM). A simple calculating feature is not the main element of the method, but adding strategic and managerial dimensions increases it.

Among the modern methods of calculation, Activity Based Costing asserted as one of the new strategic initiatives in business, being considered by experts an innovation in cost management. It is only one of the refining methods of the cost system, *“it is not an entirely new or original*

method, it is not a perfect management tool, but it seems to solve in a satisfying manner for the enterprise the limits of the traditional cost system”(Albu and Albu 2003: 158).

Following research conducted by specialists in the management accounting field, the next causes of processes' costs have been identified: the deficiencies of costing systems for contemporary costs, the diversification of the information demand for management and changes in the strategic position of the company.

We are practically dealing with two types of activities: “*on one hand, activities that can be attached to products, called **primary or main activities** (are the ones used outside the entity, either by a product or a different entity; they express the main mission of the entity, but they don't necessarily have a direct relation with the products that may be support activities) [...]; on the other hand, we are considering activities that the entity carries out in conjunction with main activities, as their support. They are called secondary activities and are not related to products”*(Bouquin 2004: 184).

Activity Based Costing was perceived as an alternative to the traditional accounting systems, having a production system organized like a set of activities. Managers were asked to consider first the resources consumed by different activities, and only afterwards to allocate costs to products. Practically, the ABC method is based on the cross-section clipping of the entity. The method became known as a cost measuring process of operations with the help of: analyzing the costs' elements, determining performances based on activities, measuring production and functional costs.

The ABC method “*provides two ways to reduce costs: it helps identify the opportunities of real reduction of costs (with the help of cost inductors) and furnishes simulations of the impact of cost reduction”*(Dumitru and Calu 2008: 186).

Once an entity decides to implement the ABC method, it must determine the level of informational details that it wants to collect and put at the disposal of management, knowing that more accurate information is much more expensive. To a certain point, the additional detail is not worth it. Cokins, Stratton and Helbling provide a useful focus on implementing the ABC method and discuss these issues. For example, the entities will have to pay attention especially to expensive resources, to resources whose consumption varies depending on the product and to resources whose demand models are not correlated to traditional allocation standards.

The ABC method “*is more than a simple cost allocation tool, it can also be a tool to control the activities of a business in order to optimize the allocation of resources”*(Mendoza and al. 2009: 167).

The hypothesis of the ABC method is that the careful analysis of activities should lead to the identification of relationships that maintain several products. Activity Based Costing rejects imputations in cascade and seeks to maintain relations between costs and the causes behind them. For this reason, the costing method believes that each entity producing directly productive activities ensures peripheral activities also. “*To gain a better understanding of the company, we look first at a measurable volume unit or at the activity that serves as cost-driver”*(Meigs and al. 1996: 955). Thus, we establish for each product a list of directly consuming activities and of those that they generate.

6. Conclusions

The improvement of management accounting in the energy sector requires adopting budgetary methods and techniques, monitoring and costing that allow simplicity, efficiency, economy, anticipation, accompanied by higher quality of the obtained results. The value created by improving costing techniques and methods in the energy sector should largely compensate the used or consumed resources.

One of the most important contributions of Activity Based Costing is that it repairs the weaknesses of traditional production costing approaches. Although the ABC method was quickly accepted, there were still a variety of opinions regarding its efficiency. Over time, by stimulating the adoption of this method, literature presented a series of factors with influence over the effectiveness of this method, particularly financial factors. The results of the study confirmed the benefits of the ABC method when it is used in parallel with other strategies and when it is implemented within entities with complex activities, where costs are relatively important.

Currently, we are talking about successfully applying the ABC method for environmental costing. The managers of entities believe that, in general, environmental costs are not significant for the functioning of their business, but they ignore that some production costs, especially in the energy sector, have an environmental component also.

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THE INTELLECTUAL CAPITAL REPORT WITHIN UNIVERSITIES: COMPARING EXPERIENCES

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The paper focuses on the intellectual capital (IC) report in universities, a relevant theme actually for the growing interest in applying an IC approach in managing universities. The paper compares the experiences in reporting IC of two different university institutions, the Autonomous University of Madrid (UAM) and the Austrian Universities, to highlight pros and cons of the two different IC models employed. In order to compare these two experiences, firstly we analyzed, through a literature review, the state-of-the-art in measuring and reporting IC, then we focus on the IC measurement models used as framework by the two institution, finally we turned our attention to the IC reports issued by the two universities. Both experiences presented refer to advanced IC measurement models, but both suffer of some limits in applying the models in practice. Like all measurement and management systems that deal with knowledge-based processes, Austrian and UAM's IC reports face the methodological problems of measuring non-physical processes and outputs. In detail, Austrian IC reports lack of qualitative indicators, UAM's IC report lacks of efficiency-related and activities-related indicators. The main research limit is that the theoretical comparison has been carried out on two experiences, due to the lack of awareness of IC relevance in managing universities. The establishment of an ad hoc IC measurement model for universities could have both internal and external benefits. As regards the policy implications, Government, ranking universities by their IC, can get information about their strengths and weaknesses and using it to reallocate resources. This study contributes to broaden the research community's understanding about a relevant management (internal) and communication (external) universities' tool, the IC report, through the examination of two real life European universities experiences in disclosing intangibles. To the best of our knowledge, this is the first paper that focuses on comparing the two best university practices in reporting IC.

Key words: Intellectual capital, universities

JEL code: M41, I23

1. Introduction

In the actual knowledge-based economy, intangible assets are seen as essential elements to value creation in companies and to economic wealth (Lev 2001). Consequently, measurement and management of intellectual capital (IC) is becoming more and more critical (Veltri, 2007). Although the IC concept was first developed as a framework to analyze the contributions of intellectual resources in for-profit enterprises, it has been soon taken over by public and non-for-profit organizations, due to its overall importance (Mouritsen *et al.*, 2004; Kong and Prior, 2008). Actually, there is a growing interest in applying an IC approach in managing universities, since their main goals are the production and diffusion of knowledge and their most important investments are in research and human resources (Sánchez and Elena, 2006). Moreover, universities are increasingly considered key actors in the wider move towards an increasingly global and knowledge-based economy and this circumstance led supranational organisms to

promote the spread of IC management within universities. At the European level, in 2002 the European Association of Research, Managers and Administrators (EARMA) in collaboration with the European Centre for Strategic Management of Universities (ESMU) launched the initiative about IC in higher education institutions and research and technology organizations (HEROs) with the objective to raise awareness and disseminating good practice research in the field of IC management and reporting among universities and research organizations (Leitner, 2005). In Ricardis' report (Reporting Intellectual Capital to Augment Research, Development and Innovation in Smes), the High-Level Expert Group encourage universities to participate in the efforts to develop IC reporting culture, as a part of a strategy to make universities accountable towards their stakeholders, by improving both the transparency in governance and their resource management and strategies (European Commission, 2006). Necessities like the increasing stakeholders' demand for more transparency, the increasing competition between universities and firms, and a wider autonomy, push universities towards the adoption of new management and reporting systems which should necessarily incorporate intangibles (Sánchez *et al.*, 2009).

The main aim of the paper is to compare IC report model applied by Austrian universities, and the Intellectual Capital Report for Universities (ICU report) model applied by the Autonomous University of Madrid (UAM) in measuring IC through a specific system of indicators.

The remainder of the paper is organized as follows. Section 2 briefly discusses the relevant literature on IC, illustrating also the declination of IC within university sector. Section 3 describes research methodology, Section 4 provides the results of the comparison between Austrian and Spanish universities IC report, while Section 5 concludes the paper.

2.Literature review on the intellectual capital measurement models and their application to the university context

Intellectual capital literature comprises a lot of IC definitions (for all, see Tan *et al.*, 2008). The definition accepted in this paper considers IC as a dynamic system of intangible resources and activities, at the basis of the organization's sustainable competitive advantage. In general terms, all of the major players in the IC community share the idea that intellectual capital, from a qualitative point of view, can be divided into three categories: structural (or organizational), human and relational capital, further validated by Meritum Project (2002). Briefly, human capital consists of knowledge, capabilities, competencies, and skills possessed by the organization's workers, the organizational capital is constituted of structured knowledge possessed by the organization and is shareable (database, procedures etc.), while the relational capital is the totality of relations between the organization and its main stakeholders.

Methods for IC measurement can be classified in four basic categories (Sveiby, 2009): 1) Market capitalization; 2) Return on Asset; 3) Direct Intellectual Capital and 4) Scorecard. The first three model focus on the financial side of measurement and the monetary value of intangible assets, whereas scorecard approaches look for indicators able to measure intangible resources and activities. It is important to highlight that scorecard methods had an evolution going from pioneering IC measurement models such as Intangible Asset Monitor of Sveiby (1997) and Skandia Navigator of Edvinsson and Malone (1997) to advanced ones, such as Danish Ministry of Technology and Innovation guidelines (DMSTI, 2003), Meritum guidelines (Meritum, 2002) and Austrian Research Centre IC model (ARC) (Chiucchi, 2004).

In the *pioneering* models, attention is focused on the content of the IC subcategories. The vision behind is a typical accounting vision, according to which IC is an aggregate of intangible resources. The mainstay of these models is the IC value measurement and their main aim is to explain causes of the differential between accounting and market value, mainly attributed to IC. The *advanced* models adopt the evolved notion of IC as a dynamic system on intangibles resources based on knowledge. In these kinds of model attention is focused on the interactions

between the IC items, at the basis of the organization's value creation and on intangible activities essential to produce, maintain and develop intangible resources. The assumption behind these IC models is the knowledge management, their main aim is to identify the paths of the organization's value creation based on knowledge.

Universities are social institution which have gone through several stages of development in their long history. In recent years, a third mission, over to the traditional teaching and research functions has been added, meaning the purpose of contributing directly to social and economic development (Brătianu, 2009). In Europe, universities are faced with numerous challenges caused by the political initiatives aimed to harmonize the different national university systems as well as new management modes proposed for universities (Leitner, 2004).

The instrument of IC report and the general methods for valuing intangible within universities finds its justification from one hand in the political and managerial challenges that require the implementation of new management and reporting systems in order to improve IC internal management and to disclose information to stakeholders, from the other hand in the consideration that national and supranational organisms recognize a central role to universities in the actual knowledge-based society (European Commission 2003; 2006). Moreover universities are knowledge producers per se: their most important output is knowledge incorporated in research results, publications and educated students (Sánchez and Elena, 2006).

Declining the IC categories in the context of universities, *human capital* is the knowledge of the researchers and non scientific staff of universities such as professors, researchers, PhD students, and administrative staff; *structural capital* comprises the governance principles and modes, the organizational routines and procedures, culture systems, databases and intellectual property; *relational capital* could be assimilated in the so-called third mission of the universities, which includes all the activities and relations between universities and non-academic partners, i.e., firms, non-for-profit organizations, public authorities, local government, and society as a whole (Leitner, 2004; Sánchez *et al.*, 2009).

On the basis of the advanced guidelines to report IC, some universities and research centres started to develop a report for describing their intellectual assets and knowledge flows (Brătianu, 2009). Among these, it is worthy to mention the Autonomous University of Madrid (UAM) experience (Sánchez and Elena, 2006; Sánchez *et al.*, 2009), since it applied the Intellectual Capital Report for Universities (ICU report) developed by the Observatory of European University on the basis of the advanced IC report models (OEU, 2006) and the Austrian Universities (Leitner, 2004; Altenburger *et al.*, 2005; Schaffhauser-Linzatti, 2004), whose IC reports reflect model and principles of the ARC, which is the most outstanding and longest experience in reporting IC in research centres. Starting from the above mentioned studies, our paper focused on the exploitation of the Austrian and UAM experiences in reporting IC.

3. Research methodology: analysing the IC measurement reference frameworks

In order to compare these two experiences, firstly we focused on the IC measurement models used as framework by the two institution, then we turned our attention to the IC reports issued by the two universities. Since it is a conceptual paper, the documental analysis appear to be the more adequate method to identify the key points of each reference model and to highlight which IC indicators are emphasized in the two different experiences.

As regards Austrian experience, the Austrian Ministry for Education, Science and Culture, in the course of the preparation of the new Austrian university law, settled a project team with the task to develop an IC report model for universities which met the specifics of their knowledge-production process in the new organizational and legal context of universities (Leitner, 2004).

The Austrian University Organization and Studies Act (Universitaetsgesetz 2002, further UG 2002) introduced an obligatory Intellectual Capital Report (further Austrian ICR).

Section 13, subsection 1 of UG 2002 states that “each university shall submit an intellectual capital report for the past calendar year to the Minister, by way of the university council, by 30 April of each year. This shall, as a minimum, present in itemized form:

1. the university’s activities, social goals and self-imposed objectives and strategies;
2. its intellectual capital, broken down into human, structural and relationship capital;
3. the processes set up in the performance agreement including their outputs and impacts.

The corresponding Intellectual Capital Report Act determines its structure and design”.

IC reporting for Austrian universities should fulfill two aims. First, it should provide internal information for the management of intangible resources. Second, it should provide external stakeholders with information about the effective use of IC (Schaffhauser-Linzatti, 2009). Additionally, since in the course of preparation of an IC report, universities have to discuss their strategy and aims and interpret IC indicators, the process of preparing an IC report foster universities to learn about their knowledge production process.

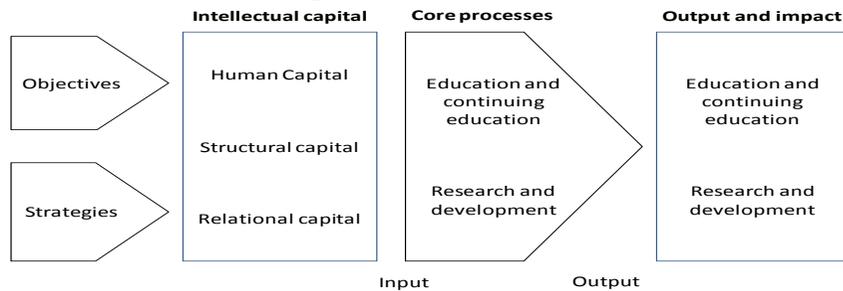
As regards the UAM experience, the Observatory of European University (OEU) ICU measurement framework is grounded in the Strategic Matrix developed within the OEU Project. From this Strategic Matrix, the 141 indicators have been reclassified into the categories of IC (Human, Organisational and Relational), creating a framework for the IC in universities (ICU framework). To create a homogenised IC Report specifically designed for universities and research centres, OEU team designed the ICU Report finding inspiration from DMSTI guidelines, Meritum experience, Ricardis project and ARC experience (OEU, 2006). ICU report comprehends three main sections: Section 1, “Vision of the institution”, Section 2 “Summary of intangibles resources and activities, Section 3 “System of indicators”. Section 1 illustrates the university mission in a narrative way. Following knowledge narrative of DMSTI guidelines, this section answers questions on the main objectives of the institution and the critical intangibles needed to reach these objectives. Section 2 describes the intangible resources that institution can mobilize and the different activities undertaken to improve the value of these resources, in doing so following Meritum guidelines. Section 3 provides a description of a system of indicators, related both to intangible resources and activities. IC indicators are both current and forward, have both an internal and an external aim, derived from university strategy and are in line with the characteristics required by Meritum guidelines to indicators (usefulness, relevance, comparability, reliability, feasibility).

4. Research results in comparing Austrian and UAM experiences

The IC measurement model

The Austrian ICR follows the Schneider/Koch model which has been developed and applied by the Austrian Research Centers Seibersdorf (ARC), in turn inspired by the Meritum guidelines (Leitner, 2005). Being the archetype of IC models especially applied by research organizations, it represents a *process-oriented* approach, since it visualizes the university knowledge production process and the role of IC as input of the process. The Austrian IC report model, following ARC model, hereby ideally sets itself against the *structure-oriented* model, focused on the classification of the different forms of IC, on their content and on their relations.

Figure 1 – The IC reporting model for Austrian Universities



Source: our adaptation of Leitner (2004)'s model

The IC measurement model followed by OEU team in preparing the ICU model is mainly inspired by the DMSTI and Meritum guidelines. The ICU report assigns a central role to the knowledge strategy, from which derive IC indicators and focuses both on intangible resources and activities that university has to carry out to develop intangible resources. The main distinctive point of the ICU model is the use of activities related indicators, its main limit is its focus on the content of IC categories and on the definition of IC indicators. This limit is common to all structure oriented model that do not allow the visualization of the IC role in the university's knowledge process.

IC indicators

In both models, IC indicators derive by a logical input-output process, starting from the strategy definition and activities' identification to carry out to develop and maintain university's IC. Moreover, in both models IC indicators are divided into the well known categories of human, organizational (structural) and relational capital. Nevertheless, in the ICU report applied by UAM, the IC subcategories mix input and output IC indicators, while the IC model of Austrian universities visualizes the separation between input IC indicators (included in the IC subcategories), process IC indicators and output (or impact) IC indicators. These last two are divided into teaching and research indicators. For instance, in the Austrian IC report model the number of researchers is an example of input IC indicator, the number of ongoing evaluated research is an example of process research IC indicator, the number of scientific publication is an example of output research IC indicator. On the contrary, in ICU report, number of researcher is included in the human capital indicators, the number of scientific publication is included in the organizational capital, the number of ongoing evaluated research is not included at all, because the model does not consider process indicators at all. Summarizing, the Austrian IC report model show clearly the role of IC as input of the knowledge-production process and separates IC indicators in teaching and research indicators. The main research limit is that the theoretical comparison has been carried out on two experiences, due to the lack of awareness of IC relevance in managing universities.

5. Conclusions

Both experiences presented refer to advanced IC measurement models, but both suffer of some limits in applying the models in practice, since the links with the institutions strategy and the role of IC in the knowledge process are hidden in the Austrian universities IC reports (wissenbilanz) and in the UAM's IC report (Schaffhauser-Linzatti, 2009). Like all measurement and management systems that deal with knowledge-based processes, Austrian and UAM's IC reports face the methodological problems of measuring non-physical processes and outputs. In detail, Austrian IC reports lack of "soft" and qualitative indicators, relative for instance to the

employees' satisfaction, climate, image (Altenburger *et al.*, 2005), while the UAM's IC report lacks of efficiency-related and activities-related indicators (Sánchez and Elena, 2006).

We think that IC report is an important tool expressive of new management control, on which universities and government should invest: comparability is possible in the future on the international level if the indicators will be selected according to commonly accepted definitions or conventions in the science community. Moreover, it will be faced and managed problems related to the structural differences that can hinder comparison (national differences in university systems, size of universities, their degree of specialization, their different stages of development in IC measurement) and if it will be addressed practical questions such as how to collect the data needed, who should be responsible of this data gathering, how frequent the IC report should be and so on (Sánchez and Elena, 2006).

The reasons for the lack of available and comparable IC universities data are several, not last the barriers to introduction of IC measurement and management models in universities on which to development standardized systems of IC indicators. Among main barriers, we can list cultural barriers (fear of measurement and new systems, lack of understanding), lack of meaningful employees involvement, lack of common definitions of terms and IC indicators, vision and strategy poorly defined and understood. In spite of this, we think that IC in universities should be measured for many reasons, such as to increase the transparency of public institutions, to allow comparison among them, to bring the "ivory-tower" university philosophy closer to the requirements of public and industry. Of course, the introduction of more objective and reliable methods for measuring IC will require to build awareness among the senior academics occupying management positions at universities, to create *ad hoc* IC measurement task force, to introduce IC measurement methodologies, timely implemented and published. The establishment of a measurement and reporting model of the university's IC could have both internal benefits, in the sense of fostering learning on the organizational level, as well as external benefits, in stimulating transparent competition. As regards the policy implications, Government, ranking or benchmarking universities on the basis of their IC, can get information about their strengths and weaknesses and uses them to reallocate resources to universities that invest on their IC. Clearly, in the future, reviewers and funding agencies will have to learn how to interpret IC information.

This study contributes to broaden the research community's understanding about a relevant management (internal) and communication (external) universities' tool. The paper could be a first step to further on develop a model that summarize the best features of both investigated models. To the best of our knowledge, this is the first paper that explicitly focuses on comparing the two best university practices in reporting IC.

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PARTICIPATORY GOVERNANCE IN THE PUBLIC HEALTHCARE SYSTEMS OF THE SCANDINAVIAN AND BALTIC COUNTRIES

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The diminished trust of citizens in the public sector, the increased complexity of policy issues and the reforms in accordance with the new public management principles generate the need of focusing more extensively on participatory governance. Participatory governance can be defined as the genuine engagement of citizens and other organizations in the formulation of policies and strategies, in the decision-making process from the public sector and in the implementation of the decisions. The present paper's objectives are to define the concept of participatory governance, to argue in favor of implementing it in the public sector and to find to what extent public healthcare institutions from Scandinavian and Baltic countries publish information on participatory governance and how they perceive community engagement. The research findings are that the information on participatory governance disclosed on the websites of relevant institutions from within the Scandinavian and Baltic public healthcare systems is scarce. The countries with the greatest concern for community engagement are Denmark and Sweden. It is argued that there should be a shift in focus within the public sector in general and within the healthcare system in particular, so that citizens are genuinely involved in the relevant processes and their satisfaction is indeed at an adequate level.

Keywords: participatory governance, engagement, public healthcare, Scandinavian, Baltic

JEL Classification: M40, H0

1. Introduction

Citizens usually take the passive role of beneficiaries of the services provided by the public sector or are directly impacted by the developed policies, without having much to say about it. Even if the discourse of public sector entities may emphasize the orientation towards the general public and their needs, it is precisely the public which is actually least empowered. The power of the citizens to influence the decision-making process in the public sector is related to the concept of “participatory governance”, which according to Sneddon and Fox (2007) is a matter of power. The present paper's objectives are to define this concept, to argue in favor of implementing participatory governance in the public sector and to find to what extent public healthcare institutions from Scandinavian and Baltic countries publish information on participatory governance and how they perceive community engagement. The paper is structured as follows: the first section includes a brief literature review, the second describes the research design, then the concept of participatory governance is defined and arguments in favor of a greater emphasis on this type of community engagement are presented. Last but not least, the penultimate section describes the results of a qualitative research on the information on participatory governance disclosed by institutions from within the public healthcare sector of Scandinavian and Baltic countries.

2. Literature review

The international body of literature on the concept of “participatory governance” is rather scarce when compared with the relevance of the issue. Participatory governance is examined as part of governance in the public sector. For instance, the paper of Edwards (2008) is part of a major project in Australia called “Corporate Governance in the Public Sector: An Evaluation of its Tensions, Gaps and Potential”. Participatory governance is considered to be a process that strengthens local democracy by opening new spaces for citizens’ participation. This understanding of the concept belongs to Peris et al. (2011), who explore the link between participatory government and urban environment planning. Actually implementing participation in the public sector is difficult, as pointed out by Sneddon and Fox (2007) who elucidate recent efforts to enhance policies of public participation within the context of governance in the Lower Mekong basin. Additionally, participatory governance was researched in the context of the public sector of the most diverse countries: China (Zhong and Mol, 2007), Brazil (Baiocchi, 2003), and Morocco (Berriane Y., 2010). The present paper builds upon the existing body of literature by developing a study on the participatory governance disclosure practices in the public healthcare systems of Scandinavian and Baltic countries.

3. Research design

The research is interpretative in nature and consists of three dimensions: conceptual clarifications on participatory governance, arguments in favor of focusing more extensively on participatory governance and analysis of the information disclosed by Scandinavian and Baltic countries on community engagement. Authors performed a qualitative analysis consisting in the investigation of the websites of different relevant institutions of the public healthcare systems from Scandinavian and Baltic countries, namely from Sweden, Norway, Denmark, Finland, Estonia, Latvia and Lithuania. The purpose of this analysis was to find to what extent these bodies publish information on participatory governance of the health system and the way they perceive community engagement. The healthcare system was first of all chosen due to its importance within the public sector, and secondly in order to continue the empirical studies performed by Ștefănescu et al (2010) regarding performance measurement and regarding the disclosure of information on social responsibility issues of public healthcare institutions. The reason for choosing to analyze the Scandinavian and Baltic countries was their pronounced and well-known interest for the well-being and social protection of their citizens and for social responsibility issues.

4. The concept of participatory governance and arguments in its favor

In the view of OECD, governance is a concept that encompasses not only the public institutions and the instruments for governing them, but also the set of relationships between governments and citizens. In this context, citizens are considered to act both as individuals and as part of or through institutions, e.g. political parties, productive enterprises, special interest groups and the media. Edwards (2008) identifies within this approach two dimensions of corporate governance in the public sector: vertical and horizontal. The vertical dimension refers to hierarchy issues within the public sector, while the horizontal one refers to the involvement of stakeholders outside of the public sector. Hierarchy is not to be ignored, since it provides the structural framework necessary for the public decision-making process. However, the involvement of citizens and organizations outside of governments is increasingly important nowadays and is the focus of the present paper.

The involvement of stakeholders outside of the public sector is not limited to disclosing to them relevant information, but also comprises their taking part in the formulation of policies and strategies, in the decision-making process and in the implementation of the decisions and

measures taken. This genuine engagement of citizens and other organizations in the public sector processes is called “participatory governance” and sometimes “community engagement”. The essence of “participatory governance” consists in all relevant non-government stakeholders having the opportunity to influence the process of policy development. They should have the chance to express their views and interests and according to Osmani (2007) should feel their opinions have been given consideration, even if the end result of the decision-making process may not fully comply with their wishes.

The main reasons for focusing more extensively on “participatory governance” are according to Edwards (2008) the following: (1) diminished trust of citizens in the public sector; (2) increased complexity of policy issues; and (3) reforms in accordance with the “new public management” principles. First of all, citizens become more cynical and less trustful in the public sector, especially on the background of the numerous “crisis measures” taken by governments, such as salary cuts, personnel cuts, and increased taxes. Second of all, the complexity of policy issues is increasingly greater and comprises the difficulty of defining issues, the involvement of several parties, and the impossibility for the governments to solve them on their own. Third of all, following the adoption of some measures from the private sector and the externalization of certain public services, governments lost part of their control and lacked the knowledge necessary for developing effective policies and offering high-quality services.

5. Participatory governance in the public healthcare systems of the Scandinavian and Baltic countries

The public healthcare system of a country is essential for the welfare of its citizens. Healthcare issues are of major interest for all citizens, at every stage of their lives, irrespective of age or social status. Naturally, a healthy lifestyle, healthcare adapted to one’s personal needs, and a proper life and work environment are highly desired both by the population, and by governments. As in the corporate sector human resources are considered the most valuable assets of companies, so in the public sector, people are a strategic resource and their wellbeing is critical. We therefore chose to focus our study on the public healthcare system and as previously presented, we limited to the Scandinavian and Baltic countries. We investigated the websites of the relevant institutions from Denmark, Sweden, Norway, Estonia, Latvia and Lithuania, in order to identify to what extent these bodies disclose information on community engagement within the healthcare system of that country and to examine the way they perceive participatory governance. An overall view of the results is presented in Table 1.

Table 1: Disclosures on participatory governance in the Scandinavian and Baltic public healthcare systems

COUNTRY	NAME OF INSTITUTION	SITE	DISCLOSURE LANGUAGE	INFORMATION ON PARTICIPATORY GOVERNANCE
<i>Denmark</i>	Ministry of the Interior and Health	http://www.sundhedsministeriet.dk/English.aspx	- Danish - English (partially)	The Danish Government launched in May 2002 the reform program “Welfare and Choice”. The underlying idea of this program is to enhance competition and quality in the public sector through choice. The citizens’ freedom of choice is considered very important. The website discloses information on the implementation of choice in education, health care, elderly care, child care, and on the implementation of choice for vulnerable groups.

COUNTRY	NAME OF INSTITUTION	SITE	DISCLOSURE LANGUAGE	INFORMATION ON PARTICIPATORY GOVERNANCE
	Danish Medicines Agency	http://www.dkma.dk/1024/visUKLSForside.asp?artikelID=728	- Danish - English (partially)	No information in English on participatory governance. However, there is some information on the corporate culture of the Agency, namely on the fact that the initiatives and ideas of the employees are encouraged. Moreover, there is information on a nationwide campaign which was launched in 2010 and sets out to encourage hospital doctors to be more active in reporting serious and unexpected side effects from medicine.
Sweden	The Ministry of Health and Social Affairs	http://www.sve.hud.gov.se/sb/d/2061	- Swedish - English	No disclosure of explicit information in English on participatory governance.
	The Swedish National Institute of Public Health	http://www.fhi.se/en/	- Swedish - English	Clear interest for participatory governance. One of the most important public health objectives is to increase people's level of participation in society. Some of the most important fields where citizens should have the chance to participate in the governing and development of society are labor market policy, media policy, gender equality, integration and disability policies.
	National Board of Health and Welfare	http://www.socjalstyrelsen.se/english/aboutus	- Swedish - English	No disclosure of explicit information in English on participatory governance. However, information on how to report malpractice or dissatisfaction in Health Care or Social Services.
Norway	Ministry of Health and Care Services	http://www.regjeringen.no/en/dep/hod.html	- Norwegian - North Sami - English (partially)	No disclosure of explicit information in English on participatory governance.
Finland	The Ministry of Social Affairs and Health	http://www.stm.fi/en/frontpage	- Finnish - English (partially)	No disclosure of explicit information in English on participatory governance. However, the Ministry started in November 2007 the Masto project to reduce depression-related work disability. It involves administrative sectors, social partners and third sector organizations. Moreover, in promoting welfare, the Ministry acknowledges the need for diverse cooperation within municipalities and groups of municipalities, and with the state, church parishes, NGOs and the private sector.
Estonia	State Agency of Medicines	http://www.sam.ee/	- Estonian - English (partially)	No disclosure of explicit information in English on participatory governance.
	The Ministry of	http://www.sm.ee	- Estonian	No disclosure of explicit information

COUNTRY	NAME OF INSTITUTION	SITE	DISCLOSURE LANGUAGE	INFORMATION ON PARTICIPATORY GOVERNANCE
	Social Affairs	e/eng.html	- Russian - English (partially)	in English on participatory governance. However, there is information on the actions in 2009 under the Implementation Plan 2009-2013 for the National Health Plan 2009-2020. First of all, it is relevant that a survey on patient satisfaction was launched, that for the first time also examined the issue of corruption. Second of all, the Estonian Patient Advocacy Association and the Committee of Experts on the Quality of Health Services were provided funds in 2009. Generally, the Ministry aims at developing a patient-centred healthcare system.
<i>Latvia</i>	The State Agency of Medicines is a Regulatory Authority	http://www.vza.gov.lv/	- Latvian - English (partially)	No disclosure of explicit information in English on participatory governance.
<i>Lithuania</i>	The State Medicines Control Agency (SMCA)	http://www.vvkt.lt/	- Lithuanian - English (partially)	No disclosure of explicit information in English on participatory governance.

Made by the authors

The general finding of the research is that the information on participatory governance disclosed on the websites of relevant institutions from within the Scandinavian and Baltic public healthcare systems is scarce. In Norway, Finland, Estonia, Latvia and Lithuania, no explicit information on participatory governance is disclosed. Their disclosure on such issues is rather limited. For instance, Finland admits that cooperation within municipalities and groups of municipalities, and with the state, church parishes, NGOs and the private sector is required in welfare promotion. In Estonia, the concern for the satisfaction of patients is obvious, and one of the Ministry's objectives is to develop a patient-centered healthcare system.

Denmark and Sweden are the two countries from this geographical area which show the greatest concern for community engagement. The Danish Government launched in May 2002 the reform program "Welfare and Choice". The starting point of this program is that the common responsibility to provide welfare services for the citizens should be combined with personal freedom to choose between different solutions. The citizens' right to choose is thus acknowledged. As a consequence, competition and quality in the public sector are to be enhanced by means of choice. On the other hand, Sweden shows clear and explicit interest for participatory governance. One of the most important public health objectives stated on the website of The Swedish National Institute of Public Health is to increase people's level of participation in society. It is considered that strengthening democracy and defending human rights reinforce the feeling of affinity in society as a whole and increase trust between people, two factors which promote good health. Opportunities to influence and participate in society are especially supported for financially and socially challenged persons, as well as children, young people and the elderly.

6. Conclusions

Participatory governance can be defined as the genuine engagement of citizens and other organizations in the formulation of policies and strategies, in the decision-making process and in the implementation of the decisions. The diminished trust of citizens in the public sector, the increased complexity of policy issues and the reforms in accordance with the new public management principles are the main reasons for focusing more extensively on participatory governance. However, the research showed that the information on participatory governance disclosed on the websites of relevant institutions from within the Scandinavian and Baltic public healthcare systems is scarce. The greatest concern for community engagement is displayed by Denmark and Sweden only. Authors consider there should be a shift in focus within the public sector in general and within the healthcare system in particular, so that citizens are genuinely involved in the relevant processes and their satisfaction is indeed at an adequate level.

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IFRS COMPLIANCE REGARDING INFORMATION DISCLOSED BY COMPANIES IN CONSOLIDATED FINANCIAL STATEMENTS - CASE STUDY ON IAS 23 BORROWING COSTS APPLICABILITY

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This paper concentrates on information disclosure regarding IAS 23, being included in accounting research field. It comprises an empirical study on the correlation between information published by companies in consolidated financial statements with respect to borrowing cost policies and a series of variables that characterize a firm. The objectives of this paper involve estimating and establishing an econometric model in which is assumed that disclosure index for information required by IAS 23 depends on certain elements in the form of country of origin, sales, total assets, debt ratio, solvency, ROA and ROE. International accounting literature presents a series of studies on the subject of compliance with IAS disclosure requirements. Similar with this paper, various authors considered annual reports as starting point for data gathering in their reasearch on disclosure phenomena. The criteria used for data gathering, processing and analysing have been previously used in a successful manner by important scientists who published in accounting field. The methodology used involves Disclosure Index computation, as well as SPSS data processing, analysis and interpretation. Results show that the model is valid, meaning that there is correlation between information disclosure with respect to IAS 23 and the analyzed variables. According to our estimated econometric model, most of the variables maintain a certain influence on disclosure as we can observe a significant correlation level between the studied elements. This research contributes to the development of both accounting field and international accounting literature, by studying borrowing costs disclosed information in relation to certain elements that best characterize the activity of a company. Although an empirical paper, it concentrates also on accounting practices, as it uses real data extracted from annual reports and consolidated financial statements. The importance of this research relies in its originality approach, by studying the information disclosure for borrowing costs that represent one of the most important accounting fields.

Keywords: information, disclosure, borrowing costs, annual reports, correlation

C51, C53, M41

I. Introduction

International accounting literature contains a serie of studies on disclosure. The most recent of them, involve the analysis of compliance with IAS requirements. Many scientists have started to consider annual reports in their reasearch on disclosure phenomena. In addition, this paper uses certain criteria in data gathering, processing and analysing that have been previously used in a successful manner by important scientists who published in accounting field. Regarding the motivation for implementing this research, there is a need to establish the level of IFRS compliance, as both recognition and appliance of IAS is considered to be an essential element in the process of accounting development. Further on, by analysing information disclosure in

financial reports, and defining its correlation to some key indicators that show the financial position and profitability of companies, IFRS requirements regarding information made public could meet progress in compliance. This study contributes to a better understanding of IFRS compliance as well as of the factors that influence information disclosure. Furthermore, international organisms from accounting field should supervise IAS acceptance and thus the process of disclosure is one important part of it.

II. Literature review

Nowadays is becoming more and more difficult to make economic forecasts without having the necessary information. Decisions cannot be made in the absence of information disclosure. Further on, in all fields there is a need for published information, otherwise negative effects of non-disclosure can appear (Edmiston 2011:281-320). There is evidence of the fact that a 'real-time reporting' can be attained only through continuous evolution of financial reporting, in order for accounting standards and policies adopted by companies in practice to reach a common point (Kueppers and Sullivan 2010:292). International accounting literature mentions the benefits of improved disclosure (Lang and Lundholm 1993), as firms increase intensity of disclosure efforts before offering public debt and equity, and thus from compliance with international standards (Barry et al. 1991). There have been many attempts to study the level of disclosure for mandatory and voluntary issues using disclosure index. Donna Street (Street 2001:27-35) made a research on factors that generate noncompliance, and uses regression analysis in order to estimate their correlation to information disclosure. By studying the information made public in annual reports, some scientists try in fact to underline the importance of disclosure for accounting and for the economy, in general. According to them, the process of disclosure assumes three main aspects or characteristics of the information to be disclosed (Hossain 2008: 661): efficiency from economical point of view of disclosed information, influence of published information on economic agents' behavior, background of disclosure decision. Results of the study reveals that banks seldom choose to disclose voluntary elements; on the other hand, for mandatory issues, disclosure and transparency meets compliance. Hossain et al. (Hossain et al. 2009:664-667) made a study on corporate disclosure measurement for financial and non-financial companies. Their research is based on some analysis criteria, including: size of the firm given by turnover or sales, profitability (ROE, ROA), complexity of business- industry, activity field, country of origin, and assets. According to the authors, all these variables are supposed to influence information disclosure in financial reporting. In scoring of disclosure index, they used 0 for non disclosed and 1 for disclosed, which is known as the unweighted disclosure approach. Another research on disclosure concerns public listed companies in Malaysia (Lee 2010: 40-42) in which is studied the level of human resource information disclosed in correlation to a series of variables: size, industry and listing. The conceptual and relational SPSS analysis is based on information disclosed in companies' annual reports. Some researchers intended to create models for borrowing costs, in order to facilitate decisions and secure debt (Booth 2006: 70-72). In addition, ROE and ROA ratio indicators are used in empirical research to perform comparative analysis for companies' data in relation to borrowing costs (Bohusova and Nerudova 2009: 35-39). Other studies on capitalization of borrowing costs and their disclosure (Chung et al. 1993: 886-893) investigate firms from oil and gas industry, the analysis revealing two types of companies: successful efforts that expense borrowing costs, and are expensed full costs which capitalize costs.

III. Research methodology

The methodology used involves *Disclosure Index* computation, as well as *SPSS* data processing, analysis and interpretation of results. Data gathering implies a selection of companies and a

detailed read through all their consolidated financial statements. Research development is being sustained by certain analysis criteria, such as: *market capitalization, company profile, headquarter, or time period*. The number of firms involved in the study has been elected in accordance to the market capitalization level corresponding to each one of the ten countries implied in the research (*France, Germany, Spain, Italy, Poland, Austria, Romania, Hungary, Ukraine and Bulgaria*) and the period of study comprises a five years' analysis (from year 2005 to 2009). The elements determined for all the 92 participating companies include: *disclosure index, sales, total assets, gearing- solvency and debt rate-, ROE, ROA*. Regarding the information disclosed by firms in their consolidated financial statements, the paper investigates the compliance with Disclosure Checklists of borrowing costs that is disclosing the *accounting policy* adopted with respect to borrowing costs, amount of *capitalized borrowing costs* and *capitalization rate*.

The function that best describes the econometric model can be presented as follows:

$$DI_t = \partial_0 + \partial_1 \text{Sales} + \partial_2 \text{TA} + \partial_3 \text{DebtRatio} + \partial_4 \text{Solvency} + \partial_5 \text{ROA} + \partial_6 \text{ROE} + \partial_7 \text{Country} \quad (1)$$

In the above function, t is the year of study and takes values from 2005 to 2009. Disclosure Index determination involved two stages. First of all, for each one of the three items to be disclosed, in the form of borrowing costs policy adopted by company, amount of capitalised borrowing costs and capitalization rate, were denoted with '1' in case information for that item has been disclosed in the annual report, and '0' for the firm that did not publish the respective information. The second step involved summing up the result for the three elements, and then dividing by three- as this was the maximum probability for disclosure.

$$DI = \sum(d_i \text{ effectively presented}) / \sum(d_i \text{ all the possible cases}) \quad (2)$$

IV. Interpretation of results

Table no. 1. SPSS- Descriptive statistics: Correlations

(Source: own computations)

	Disclosure Index				
	2005	2006	2007	2008	2009
DI	1,000	1,000	1,000	1,000	1,000
Sales	0,102	0,076	0,073	0,132	0,076
Total Asset	0,105	0,093	0,051	0,091	0,070
Debt ratio	-0,058	-0,185 **	-0,214 **	0,062	0,159 *
Solvency	0,075	0,187 **	0,211 **	-0,073	-0,181 **
ROA	0,224 **	0,024	0,115	0,003	-0,031
ROE	0,216 **	-0,005	-0,027	0,009	-0,011
Romania	-0,545 ***	-0,529 ***	-0,564 ***	-0,450 ***	-0,432 ***
Bulgaria	0,025	0,007	0,011	0,003	-0,034
Hungary	0,255 *	0,305 **	0,229 **	0,170 *	0,147 *
Poland	0,056	0,0015	0,024	0,006	-0,075
Ukraine	0,031	0,008	0,013	0,003	0,130
Spain	0,066	0,017	0,028	0,007	-0,089
France	0,042	0,231 **	0,263 *	0,097	0,079
Italy	-0,175 **	0,127	0,129	-0,114	-0,080
Germany	0,139 *	0,043	0,036	0,060	0,201
Austria	0,052	0,014	0,022	0,139	0,092
Significance	*, for Sig $\leq 0,10$		**, for Sig $\leq 0,05$		***, for Sig $\leq 0,01$

Table no. 2. Results

Year	Variables	Independent	Variable	Alfa	T (sign.)	F (sign.)	Adj.R ²
2005	DI	Sales, Total Assets, Debt Rate, Solvency, ROA, ROE	Sales	5,970	0,167	4,974	0,396
			T.A.	5,353	0,159		
			Debt rate	0,039	0,291		
			Solvency	0,032	0,238		
			ROA	0,109	0,016		
			ROE	-0,0013	0,019		

Year	Variables	Independent	Variable	Alfa	T (sign.)	F (sign.)	Adj.R ²
2006	DI	Sales, Total Assets, Debt Rate, Solvency, ROA, ROE	Sales	3,422	0,236	4,611	0,373
			Total Assets	9,253	0,188		
			Debt rate	-0,0057	0,039		
			Solvency	0,058	0,037		
			ROA	-0,0023	0,411		
			ROE	0,00423	0,481		

Year	Variables		Variable	Alfa	T (sign.)	F (sign.)	Adj.R ²
2007	DI	Independent Sales, Total Assets, Debt Rate, Solvency, ROA, ROE	Sales	3,0988	0,244	4,897	0,391
			Total Assets	-0,017	0,315		
			Debt rate	-0,0085	0,020		
			Solvency	0,060	0,022		
			ROA	-0,0014	0,137		
			ROE	0,0037	0,399		
Year	Variables		Variable	Alfa	T (sign.)	F (sign.)	Adj.R ²
2008	DI	Independent Sales, Total Assets, Debt Rate, Solvency, ROA, ROE	Sales	3,982	0,105	2,683	0,217
			Total Assets	-3,7	0,195		
			Debt rate	0,235	0,278		
			Solvency	0,331	0,244		
			ROA	0,005	0,490		
			ROE	-0,0005	0,467		

Year	Variables	Independent	Variable	Alfa	T (sign.)	F (sign.)	Adj.R ²
2009	DI	Sales, Total Assets, Debt Rate, Solvency, ROA, ROE	Sales	1,1826	0,234	2,672	0,216
			Total Assets	-0,861	0,253		
			Debt rate	-0,101	0,065		
			Solvency	-0,088	0,042		
			ROA	-0,443	0,385		
			ROE	0,0949	0,459		

(Source: own computations)

Table no.1 presents the correlation between Disclosure Index and its corresponding variables (Sales, Total Assets, Debt ratio, Solvency, ROA, ROE). In analyzing the evolution of correlation coefficients for the 5 years' period (2005-2009), we consider three significance thresholds, of 10%, 5% and 1%. The results show that according to our estimated econometric model, most of the variables (Sales, Total Assets, ROE and ROA), maintain a strong influence on disclosure for year 2005, as we can observe a high correlation level between the studied elements. In addition, we can observe that in most of the case, Pearson Coefficient registers values that are above the significance levels (see Table no.1). One of the variables that influences disclosure index with respect to borrowing costs is represented by *sales*. Pearson Coefficient for sales (0,102) shows that the more complex the company is, having a high turnover, the higher the level of published information. This is also valid for the case of *total asset*. Its coefficient of 0,105 demonstrates that as a firm increases its assets, it is also willing to publish a greater amount of information. On the other hand, for both *debt ratio* and *solvency* there is a low correlation level in their relation to disclosure index. For instance, debt rate has a negative correlation with respect to DI, which means that in some of the cases (tough, few, as the value of -0,058 does not indicate a significant influence) when a company's debt ratio increases, disclosure concerning borrowing costs has in contrast a tendency to decrease. Concerning ROA and ROE for year 2005, although they seem to be highly correlated with the indicator showing information published by firms in accordance with IAS 23, the significance level is lower than 0,05 (see Table no.2). For years 2006 and 2007 we can state that again debt ratio and solvency show high correlation, but similar with the previous year, the level of significance does not reach 5% (see Table no.2). The other variables do not register coefficients that should indicate a relevant influence for disclosed information regarding borrowing costs. However, there is the exception of Pearson's coefficient for ROA recorded in 2007 (0,115), that stands for a strong correlation between disclosure index and ROA for the mentioned year. The last period of our analysis (2008-2009) is characterized by some evidence of correlation- sales from 2008 (0,132), as well as debt ratio and solvency, in 2009 although for the last two items the significance level is under 10%, respectively 5% (see Table no.2). Regarding the assumption that the country in which a company has its headquarter and where it has been set up has an influence politics adopted concerning information made public, the findings suggest that Romanian companies have similar behaviors when it comes to publishing information regarding borrowing costs. In addition, the significance level is lower than 1%. Further on, Bulgaria registers a small influence on disclosure index for the entire period of 5 years' analysis, the maximum value being under 0,03. Similar values for Pearson's Coefficients are recorded for Poland and Spain, that present a negative correlation in 2009 (-0,075 and -0,089). Ukraine does not seem to have an important influence on disclosure with respect to borrowing costs, excepting year 2009 (0,130). For France, there is evidence for high correlation in 2006 and 2007, but the significance level is under 5% and 10%. In case of Italy, it seems that there is both positive and negative strong correlation. For years 2006 and 2007 the recorded values (0,127 and 0,129), imply that this country influences the firms that have headquarters and were set up within its borders, in the matter of information disclosure policy for IAS 23 issues. In 2008, Austria recorded a high degree of influence on its companies with respect to borrowing costs, while in 2009 Germany seems to also have a great impact on the way its firms publish information of IAS 23 appliance.

Finally, regarding the relevance of the econometric model, according the SPSS analysis, the dependent variable (disclosure index for borrowing costs information) is explained through the model in a percentage of 39% in 2005 and 2007, 37% for 2006, while in 2008 and 2009 this amount decreases to 21%. In addition, the values for adjusted R² stand as evidence for the mentioned facts.

V. Conclusions

This paper is meant to study the consistency of information published by companies in their consolidated financial reports. The research objective relates to the impact of international accounting standard IAS 23 Borrowing Cost demands on companies' accounting policies. Further on, the study involves estimating and establishing an econometric model in which is assumed that disclosure index for information required by IAS 23 depends on certain elements in the form of country of origin, sales, total assets, debt ratio, ROA and ROE. The importance of this research relies in its originality approach, by studying the information disclosure for borrowing costs for a 5 years' period, starting with 2005, until 2009, and also by considering a large sample of companies being significantly chosen. On the whole, this paper is meant to bring a national and international contribution to the literature of borrowing costs, as one of the most important accounting fields.

Results show that the model is valid, meaning that there is correlation between information disclosure with respect to IAS 23 and the analyzed variables. According to our estimated econometric model, most of the variables maintain a certain influence on disclosure as we can observe a significant correlation level between the studied elements. Regarding the relevance of the econometric model, according the SPSS analysis, the dependent variable -disclosure index for borrowing costs information- is explained by the model, adjusted R² taking values between 21% and 39%. This research contributes to the development of both accounting field and international accounting literature, by studying borrowing costs disclosed information in relation to certain elements that best characterize the activity of a company. Although an empirical paper, it concentrates also on accounting practices, as it uses real data extracted from annual reports and consolidated financial statements.

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RESSOURCES ALLOCATION POSSIBILITIES WITHIN HEALTH SERVICES

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The state policy in the health care area must take into account the complexity and specificity of the domain. Health means not only “to treat”, but also “to prevent” and “to recover and rehabilitate the individual physically”. Regardless of the adopted health insurance system, the health system is facing a big problem and this is the insufficient funds necessary to function properly.

The underfunding may have various causes, from a wrong health policy, based on “treating” instead of “preventing”, by the misuse of funds. This papers intended to formulate assumptions that underpin the research I am conducting within the Doctoral Research Program held at the Valahia University of Targoviste, which aims at using the management control in increasing the health services performance.

The application of the accounting and management control methods in determining health costs can be a beginning to streamline the system. This is also a result of the fact that health care is a public service with specific characteristics: it can not be subject only to market requirements but at the same time he must undergo an administrative savings, representing a typical case of market failure.

The increased cost of treatment, as well as the decline in their quality can be determined by the discrepancy between the funding and payment mechanisms. Different payment systems currently available do nothing but perpetuate the shortcomings in the system. Switching to the introduction of cost and budgets by cost centers or object (if solved) can be a step forward for a better management of resources. In this context, we consider as a necessity to be imposed the cost analysis on responsibility centers, the definition of the cost object and cost center identification and determination of direct costs and those indirect services to choose the basis for the allocation of cost centers and the determination of each actual cost per diagnosis.

Keywords: health, revenue allocation, management accounting, costs

JEL Classification: H51, I18

1. Introduction

Health is a factor with direct implications for the proper conduct of social life and economic activity.

The definition of health, provided by the World Health Organization, states that, “*Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity*” (Voiculescu 1986: 5). Analyzing this definition there might be drawn the conclusion that the health policy should be an objective of state policy. This is particularly important, since the health should be considered from a triple perspective: *political and demographical*, according to which “the health of a nation depends on the health of its members”; *economic*, a healthy population is a premise for a greater productivity, and *social*, designed to provide a healthy life.

State health care policy must take into account the complexity and specificity of the domain. Health is not just “treating”, but also “preventing” and “recovering and rehabilitating the individual physically”. It follows that health care is not only a problem of health assisting, but

also a profound social problem, an integrant part of all the social and economic conditions for development.

In the last decades there have been multiple and profound changes in the health system, from changing funding schemes, to the reshaping the whole system. The purpose of these changes was, on the one hand, to ensure a balance between health system's income and costs, and, on the other hand, to increase performance sectors of health, so that the population health and quality of health services in Romania to be, as much as possible to those existing in European Union countries. Giving the Romania's accession to the European Union, the population health state and health services in EU member countries, become also the Romanian reference in this field.

Public health system has undergone numerous reforms, designed to ensure better use of available resources, in order to meet the European values in this domain: the right to health care, ensuring the access to health care, respecting the right to free choice of provider, and equal opportunities.

The transition from centralized health insurance (type Semasko), to health insurance system type Bismarck, based on the principle of social solidarity, has changed the financing method, but has not solved the big problem facing the health system, that is, the lack of necessary funds.

The problem of underfunding of the health sector continues, regardless of the measures taken. Underfunding may have various causes, from bad health policy, based on the "treat" and not "prevent", by the misuse of funds.

2. Health sector, typical case of the market failure

Health care is a public service with specific characteristics: it can not be subject only to market requirements but also it must run under an administrative economics system.

In 1963, Kenneth Arrow pointed out in his "*Uncertainty and the welfare economics of medical care*", that health services are a particular market, highlighting that this is not a traditional, self-adjustable, market but rather a typical case of market failure.

According to Simona Haraga, the main causes of this market failure are: heterogeneity of health services, information asymmetry between consumers and providers of health services, consideration of health services as a public service, moral hazard both for the supplier's and patient's side, and the particular situation of monopoly or oligopoly on the market, that allows the providers to set the price (Haraga 2007).

Arrow shows that "the uncertainty in the incidence of disease and treatment efficacy determines the competitive markets to inefficient resources allocation, and thus to contribute to the appearance and intervention of an administrative institutions (non market) as compensation for market failures" (Arrow 1963). Despite its controversial nature, this idea turned into a fertile ground for developing theories regarding the formation of social institutions.

There have been remarkable changes in the health system, since the Arrow's article publication. Health expenditure has increased dramatically, both because of increased demand for health care and because the diversification of investigative methods are accompanied by their cost increases. This directly led to the emergence of new diversification entities in order to relieve the public health care system and increase the efficiency of existing units.

Another fact to bear in mind is that health is a particularly good, which determines a certain specificity in health insurance services. By the impossibility of substitution of such goods, unlike the classical goods and services, caused by situation of unaffordable purchase, and by the specific way to insure against such risks, health care has totally different features from all other goods.

"Individual health" is a complex phenomenon, influenced by many factors whose action may not always be controlled, including:

- The quality of the individual (hereditary endowment, level of general education, basic medical education, eating habits, preventive attitude, etc.).
- Living environment (pollution, stress etc.).

- The life standard (material and financial conditions);
- Healthcare system (health care institutions, medical equipment endowment, medical personnel, the quality of medical care, etc.).

At the same time, individual health determines individual behaviour, personal growth, social and economic development and, not least, the quality of his life.

Health policy, as an integrant part of social policy, requires significant financial resources. Alongside the economic expansion and the scientific medicine, health expenditures have a tendency to increase due to factors such as: health care needs amplification, as effect of population growth and it's structure change, increased risk factors, the increasing cost of medical services as a result of introduction into medical practice new ways of investigation, treatment, medication, the increase in number of medical professionals, etc. In modern health systems, an increasing importance is granted to the theory according to that the medicine should not be the patient's medicine, but primarily it has to be healthy human medicine that emphasis on disease prevention.

In these circumstances, financial resources for health care are used predominantly for investments (building hospitals and their endowment with medical equipment and tools, and adequate means of transportation), for maintenance and normal operation of hospitals, dispensaries (salaries and other personnel rights, medical supplies, medicines, expenses for patients' food, repairs, etc.) and to ensure disease prevention.

One can appreciate that, globally, in the last three decades (1960-1990), the value of health expenditures doubled in most developed countries. According to UNCTAD's Human Development Report 1998, the share of total health expenditure in GDP in OECD countries increased from 4.5% in 1960 to 9.7% in 1991; in North America from 5.3% to 13.0%; in the European Union from 4.1% to 8.2%. In developing countries there has been total, also a share of the public health expenditures in GDP (from 1% in 1960 to 2% in 1990), but large differences between countries.

3. Imbalances in the Health services financing

Setting up the revenues for financing health services combine different ways: public financing (governmental) having taxes as main source, social security contributions made by private insurance (conducted by individual payment of insurance premiums) and patients' direct payments.

With the exception of the last way, these systems provide all the insurance schemes elements, meaning that they collect and distribute risks. The first two funding categories provide health services for free or below their price, based on past entitlements arising from contributions paid by all taxpayers.

Similar to insurances schemes, health financing schemes can provide an element of mutual support. The contributors with higher risk and those who have a lower income are partially supported by those with higher incomes and lower risks. Given the correlation that exists in all countries between low income and increased risk of disease, this support is necessary to be provided.

The autonomous public institution of national interest, which administers and manages the health insurance system in Romania, is, according to the Law no. 95/2006, National Health Insurance House (CNAS).

The Single National Health Insurance Fund's incomes are constituted of contributions from individuals and businesses, grants from the state budget, donations, sponsorships, interest, income derived from the heritage of the National Health Insurance House and the county health insurance houses, amounts from the revenues of the Ministry of Public Health and other income, according the law.

The overwhelming share of Single National Health Insurance Fund's incomes has as source the contributions of individuals and legal persons (Table no. 1).

Table no. 1. - The structure of funding of health care in Romania in 2004-2009 (%)

	2004	2005	2006	2007	2008	2009
Total revenues	100	100	100	100	100	100
State Budget	1.33	5.44	2.07	6.08	9.28	5.97
National Health Insurance House	96.84	93.65	95.44	93.46	90.26	93.92
Other sources	1.84	0.91	2.49	0.46	0.46	0.10

Source: Calculated by the author, based on data from annual reports of National Health Insurance House

According to the Health Insurance Fund budget, health expenditures might be divided into two broad categories: health care costs and Fund's administration expenses.

The expenditures for medical services include materials and supplies of medical services, such as: primary care, specialized outpatient care (except medical laboratory services), medical laboratory services, outpatient dental care, hospital services, medicines and materials typical used in hospitals for some chronic diseases and specialties based on programs, assistance with medications in outpatient treatment, medical devices, pre-hospital emergency medical services, health services, recovery and rehabilitation health care services at home.

Analysis of the structure of expenditure in the health system indicates the large share of expenditure in health care facilities with beds (Table 2).

Table no. 2. Structure of health expenditure in the period 2005 - 2009 (%)

	2005	2006	2007	2008	2009
Total expenditure of which:	100	100	100	100	100
Pharmaceutical products, sanitary materials and medical devices	23.15	31.57	31.19	29.43	28.02
Outpatient Medical Services	10.69	10.40	12.78	15.75	12.39
Pre-hospital emergency services	2.95	2.84	2.87	3.34	4.05
Medical services in hospitals with beds	52.40	48.76	46.53	45.21	47.93
Medical care at home	0.03	0.04	0.08	0.12	0.12
Administrative expenses of the Fund	1.31	1.64	2.12	1.50	1.24
Other expenditures	9.48	4.74	4.44	4.64	6.24

Source: Calculated by the author on the basis of the Health Insurance Fund Budget draft for 2005-2009

Given that revenues are reportedly growing CNAS, there is a shortage in the financing of health services (Table no. 3).

Table no. 3. The shortage in the financing of health services in Romania (thou lei)

	2005	2006	2007	2008	2009
Total revenues	8474378	10151441	13080571	15780537	14623761
Total expenditure	9157441	10170503	12859102	16636256	15274758
of which:					
Deficit Financing	-683063	-19062	221469	-855719	-650997
% Shortfall in income	-8,06	-0,19	1,69	-5,42	-4,45

Source: Calculated by the author on the basis of the National Health Insurance House (CNAS) reports

Naturally, appears the question: Why this money shortage in health financing? The question is the more legitimate, giving that, in recent years, in addition to public sector health insurance has

grown the private healthcare sector (in 2009 there were approximately 380,000 policyholders in the private sector).

There might be multiple answers:

- An increased demand for medical services due to deterioration of health;
- Inadequate collection of revenues;
- Inefficient allocation of funds for different categories of expenditure;
- Lack of a cost management (cost control) to the major health providers (hospitals).

The following paragraph will address the last two answers identified.

4. Methods of allocating public funds in health sector

Health care system performance depends largely on how the payment system for health care providers is organized.

Arrangements for funding the system can not be treated separately nor from payment mechanisms nor to the types of care provided.

Increased cost of health care services, as the decline in their quality can be determined by the discrepancy between the funding and payment mechanisms. On the health care market, the consumer does not have sufficient knowledge to make voluntary, independent choices. The supplier, in our case the doctor, is one who sets the price and influences the demand. Because doctors can decide the treatment, the medication and the quantity of services, through their behavior, they can influence the cost, efficiency and quality of health services.

Different payment methods determine different behaviors, depending on their typology.

Payment per service has as main unit of payment the medical examination or medical act itself. The supplier is paid in proportion to services rendered. The method is used in hospitals, health centers and individual physicians practice. Providers may be tempted to raise the number of services, even some of them are non-necessary. Also, from the patient's side might be observed the same tendency to over use these services.

Pay per capita represents a fixed amount payment over a period of time for each patient entered on a doctor's list, regardless of the number of services. Age or gender might influence the price per patient. In this case, there may be the tendency to attract only healthy individuals on their lists, preventing access of patients ("cream skimming"). Also, the number of services could be reduced to that required.

Payment per case has as payment unit the service package or the number of hospitalized patients. The supplier receives, through a standardized contract, a predetermined amount for the package or hospitalized patients. This method is used in hospitals funding. There is a tendency to reduce the duration of hospitalization, a diminution of services per case, but also for selecting cases with less severe disease.

Pay per day-hospital care causes the tendency to increase length of hospitalization, knowing that the last days of hospitalization are even less expensive. This form of funding tends to over-increase the hospital beds utilization and the appearance of oversized health care units. In this context, the number of services per case will fall.

Payment by salary represents the monthly payment to the doctor, with a fixed amount, regardless of the number of patients treated, the quantity and cost of health services provided.

The overall budget is the amount allocated in advance to the provider. It may decide to redistribute money on various items of expenditure. This payment method is used for hospitals and health centers.

Each type of payment for service health providers has specific limitations.

In this context, we consider that it would require the cost analysis by responsibilities centers.

In order to increase performance in the health sector and better management of funds, David W. Young proposes the introduction of the management accounting in the patients' care (Young, 2003).

This process involves six strategic decisions in determining costs, taking account of sector specific analysis:

- Definition of the cost object;
- Identification of cost centers;
- Identification of the direct and indirect costs;
- Choose the basis for allocating service cost centers;
- Select the method of allocation;
- Attaching to the cost of a cost centre a cost object.

These decisions are no more than cost accounting methodology.

Conclusions

In the case of hospitals, the cost object can be represented either by the cost of hospital inpatient days, either by an episode of illness (diagnosis). The introduction in 1983 of DRGs (Diagnostic Related Groups) changed the cost of the hospital subject to a "day care" at discharge for a given diagnosis. Using this method represented an attempt to uniform and somewhat to standardize the expenditures for a specific diagnosis.

DRGs system has often been criticized because, most often with a specific diagnosis, there are associated other related diseases that can lead to increased costs. In addition, patient care activities are carried out in units having different endowments than those considered as standards, which involve different overheads.

These observations lead to the necessary to identify appropriate cost centers and their budgeting. The cost centers delimitation within the healthcare unit, affects the way of aggregation of these costs. If the budgeting is done at the organization (hospital) level, there is likely to overstatement the overhead costs, which will then be distributed to each item of cost. If the organization is divided into a many cost centers, the expenditures to can be better managed. From the management perspective, the costs are better identified and more easily to calculate if they are grouped on homogenous activities.

Acknowledgement

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THE INTELLECTUAL CAPITAL STATEMENT AND THE BALANCED SCORECARD AS COMPLEMENTARY MODELS IN MEASURING FIRM'S INTANGIBLES. AN EXPLORATORY STUDY

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The purpose of this paper is to examine the role of two different new management tool, the Balanced Scorecard (BSC) and the Intellectual Capital Report (ICR) in managing and reporting intangibles. Unlike the majority of IC scholars the author, and consistently with Bukh et al. (2005), the author starts from the idea that BSC and ICR are not alternative, but complementary tools in measuring intangibles, addressing different needs for firms that measure, manage and report intangibles. The research hypothesis of the paper will be demonstrated through the analysis of a case study of an Italian group which use both intangibles' reporting systems. A case study methodology has been chosen, given that it is widely used by researchers and provide the basis for the application of ideas and extension of methods (Yin, 1994). Intercos group has been chosen to test the research hypothesis, since it makes use of both models in measuring and reporting intangibles. The study of the case Intercos group found evidence that the two types of extended reporting are different and yet complementary and that both tools are necessary for firm in measuring IC, since they address different aims. This includes therefore a marked difference in use of indicators, given that IC indicators in the ICR have to support the overall aims derived by company's strategy, while BSC indicators provides a breakdown of strategic goals with respect to profitability, growth etc. The contribution of the paper to the IC literature is to extend the findings of the Bukh et al.'s (2003) study, investigating the hypothesis (and finding evidence) that BSC and ICR are complementary in reporting intangibles in an Italian group. Implications of the paper are for company's manager, who increase the awareness that they have at their disposal two management tools, with address different aims, to manage intangibles.

Key words: Intellectual capital report, balanced scorecard, complementary models

JEL code: M41

1.Introduction

In the present economy, known as the knowledge-based economy owing to the critical role played by this factor, relevant changes, external (related to the competition's modalities) and internal ones (related to the resources' composition) has caused a modification in value creation modalities, whose main source is no longer based on the production of material goods, but on the creation, acquisition and evaluation of intangibles (Prism Report, 2003). Since intangibles have become the main value drivers for the 21st century firm, the problem measuring intellectual capital (IC) performance became a central issue in measuring firm's performance.

The definition and classification of intangibles (or IC) is still an open question (Zambon, 2003). The definition accepted in this paper considers IC as a dynamic system of intangible resources and activities, at the basis of the organization's sustainable competitive advantage. All of the major players in the IC field share the idea that intellectual capital, from a qualitative point of view, can be divided into three categories: structural (organizational) capital, human capital and relational capital; even if the labels utilized are different, the content of categories is more or less quite similar. Briefly, human capital consists in knowledge, capabilities, competencies and skills possessed by firm workers. Organizational capital is constituted by structured knowledge

possessed by firm and shareable (database, procedures etc.). Relational capital is constituted by the totality of relations between firms and its main stakeholders (Bontis *et al.*, 1999).

Basically, methods for measuring IC can be classified in methods focused on the financial side of measurement and the monetary value of intangible assets and “scorecard” methods that look for indicators able to measure intangible resources and activities (Sveiby, 2009). To the category of scorecard methods belong methods measuring multiple aspects of firm’s performance, including intangibles, such as the Balanced Scorecard (BSC) and methods developed ad hoc to measure intangibles through a system of IC indicators disclosed in an IC report (Chiucchi, 2004).

The main’s paper aim is to demonstrate, by using case study methodology (Yin, 1994), that Balanced Scorecard (BSC) and IC Report (ICR) models are not alternative but complementary model in measuring intangibles.

2.Literature review on the IC scorecard measurement systems

The Balanced Scorecard (BSC) belong to the multidimensional firm’s performance models (Bitcici *et al.*, 1997), developed to overcome the limits of the traditional, mono-dimensional performance measurement models, focused only on the accounting/financial side of firm’s performance. Briefly, in the BSC four perspectives are considered: financial, customer, processes and learning and growth perspective. The *financial* perspective identifies long term financial results; the *customer* perspective allows managers to ask themselves on what factors client consider really important and which actions the firm have to implement to reach customer satisfaction; the *processes* perspective is an internal one, which allows managers to evaluate which factors have a deep impact on client’s valuation, such as production and delivery times, productivity, flexibility, etc.; the *learning and growth* perspective concurs to the distinctive competencies which maintain and increase the firm’s competitiveness. BSC tool had great evolution with time, from a performance measurement system (Kaplan and Norton, 1992), to a strategic performance management system (Kaplan and Norton, 1996, 2001), to a system focused on transformation on intangible assets intangible results (Kaplan and Norton, 2004).

Our analysis focuses only on BSC in relation with the measurement of intangibles and on its role in measuring . Until 2004, in fact, authors had never explicated their concept of IC, so the IC scholars made a connection between the three non-financial areas, especially the one of learning and growth, and the IC. In 2004 Kaplan and Norton “making official” the shift of the BSC from strategic management tool to an intangibles management tool by providing their own version of IC, identifiable within the learning and growth perspective. According Kaplan and Norton (2004), IC can be divided into human (employees’ skills, talent and knowledge), information (databases, information systems, networks and technology infrastructure) and organizational capital (culture, leadership, employee alignment, team work and knowledge management). Such division perplexed some IC scholars, since it does not consider the traditional IC division in human, structural and relational capital on which, in recent times, there is an almost general convergence (Marr and Adams, 2004). For this reason, BSC is a model included, by some IC scholars, in the measurement of intangibles models (Sveiby, 2009; Zambon, 2003).

There are different positions in doctrine about the usefulness of BSC in measuring intangibles. Some scholars (Bontis *et al.*, 1999; Petty and Guthrie, 2000) consider BSC a fundamental tool to measure intangibles, some others question the use of the BSC model to value intangibles since it is not a model created ad hoc to measure IC, and intangibles, for their own peculiarities had to be measured by *ad hoc* measurement systems (Mouritsen *et al.*, 2005; Lev, 2001).

The IC scorecard measurement models had an evolution passing from the first, *pioneering* studies to the *advanced* ones (Chiucchi, 2004; Veltri 2007). To the pioneering models, belong, among others, the Intangible Asset Monitor – IAM (Sveiby, 1997) and the Skandia Navigator

(Edvinsson and Malone, 1997); to advanced models belong, among others, the IC report models developed under the Meritum (Meritum 2002) and the Danish project (DMSTI, 2003).

Briefly speaking, in the *pioneering* models, attention is focused on the content of the IC subcategories. The vision behind is a typical accounting vision, according to which IC is an aggregate of intangible resources. The mainstay of these models is the IC value measurement and their main aim is to explain causes of the differential between accounting and market value, mainly attributed to IC. The *advanced* models adopt the evolved notion of IC as a dynamic system on intangibles resources and activities based on knowledge. The attention is focused on the interactions between the IC items, at the basis of the organization's value creation, and on intangible activities essential to produce, maintain and develop intangible resources. The assumption behind these IC models is the knowledge management, the main aim of the advanced models is to identify the paths of the organization's value creation based on knowledge.

Our position is that both instruments, BSC and ICR, are needed to measure intangibles, and we try to prove it by analysing a real life case of a company that use both tools in measuring intangibles, with different aim, in the next paragraph.

3. Research methodology: the Intercos case study

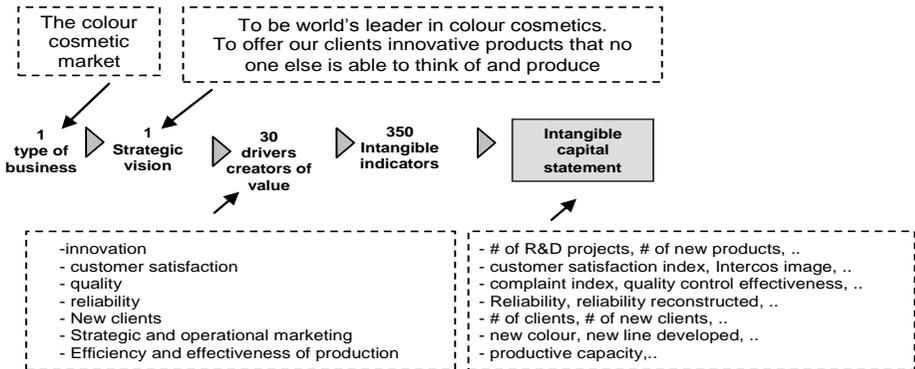
The research method used to investigate if BSC and ICR are complementary tools in measuring intangibles is the analysis of a qualitative case study. Case study methodology is widely used by researchers across a variety of disciplines to examine contemporary real-life situations and provide the basis for the application of ideas and extension of methods (Yin, 1994). We took the idea of the paper from the Buhk *et al.* (2003)'s study, which investigated the same research question for a Danish software company, Systematic Software Engineering, finding that BSC and ICR were different and yet complementary when applied to Systematic Software Engineering.

In details, the ICR and the BSC of an Italian group, Intercos, have been investigated in order to highlight the different role of the two tools in measuring intangibles and to analyze their relationships. Intercos group's history is excellent, since it focuses on innovation and capability to manage the complexity of business. Intercos group experienced a big growth: founded in 1972, it has become an international firm, global leader in creation, development and production of make-up products. In the last years Intercos group has confirmed its leadership in the cosmetic sector. Intercos is one of the few Italian group to issue an IC report and the only one in the cosmetic sector. Our analysis focused on 2004 Intercos group's ICR and BSC, since after 2004 Intercos group stopped to disclose its IC report to stakeholders (Gasperini and Novellini, 2004).

The attention of Intercos towards intangibles was a reaction to a stakeholder satisfaction survey, in which customers and employees did not consider fully satisfying the relationship with company (only 50% were fully satisfied). The results of the survey pushes Intercos to consider the opportunity to issue an IC report (Gasperini and Novellini, 2004). The identification of intangibles indicators was a shared process, on the basis of interviews and workshops which had the aim, at first to identify the type of company business and of its vision, then to identify the strategic areas of value creation (30 value drivers creators were identified) and to define a set of key indicators (350 intangible indicators were identified, which have also the finality to evaluate the employees' behaviour (fig.1). In 2004, the main aim of the IC Report (*Intercos Group Global Report*) was to enlighten the culture and philosophy which animates Intercos group. In preparing the ICR, Intercos Group declared to follow DMSTI guidelines. The strategy (a global one) defines the framework within which initiatives related to knowledge resources taking place. The Intercos Group approach put the customer at the centre, and each section (customer, innovation, marketing, supply chain, people) illustrates a series of intangibles indicators focused on customer and related to the global strategy; the section dedicated to *customers* summarizes important information with regard to *customer satisfaction*, measured in relation to company'

innovation, marketing, organisation, employees skills, quality and corporate image, measures in client perspective and in a cross-valuation between clients and human resource perspectives. *Innovation* is the basis of Intercos’s competitive advantage and the data presented in this section are related to raw materials, projects, products, and processes show the corporate performance on innovation. The section destined to *marketing* contains a description of the results achieved by the marketing division, then it examines the results achieved in the strategic market area (which includes the creative activities) and in the operative one, which are strictly linked. The section destined to *supply chain* contains a description of the company plants; the focus is on reliability and quality indexes. The section dedicated to *people* contains, apart from a deep workforce analysis, data on diversity management and the results of the survey on employees and top manager with relation to their satisfaction, motivation and energy, leadership and emotional competence.

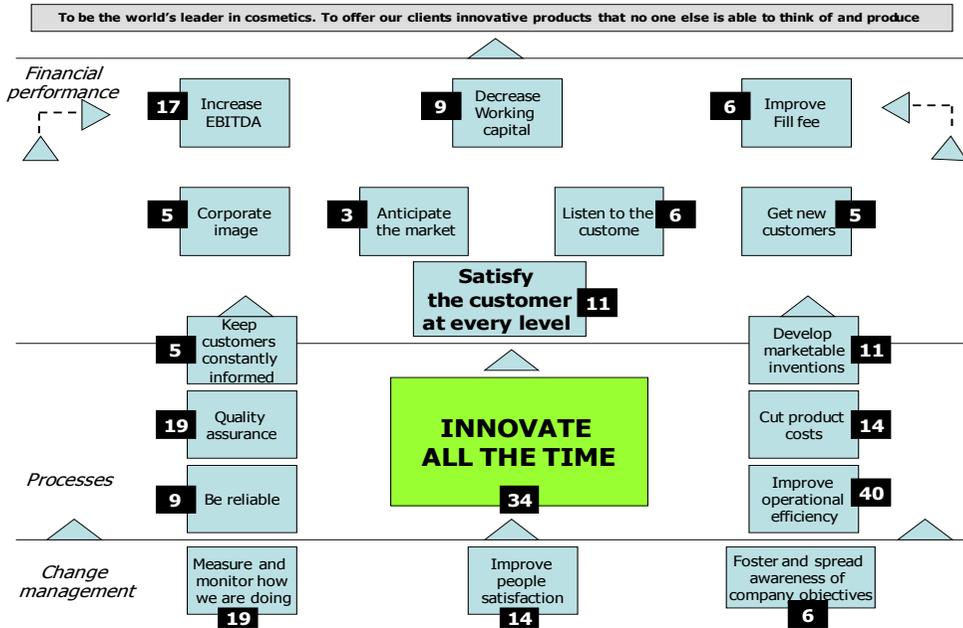
Fig. 1 – The process of IC report in Intercos Group



Source: own adaptation from Gasperini and Novellini, 2004

The declared aims of the Intercos group’s BSC are to monitor the key factors for Intercos group within the BSC framework and to communicate corporate strategy within Intercos group (fig 2).

Fig. 2 – The intangibles resources in 2004 Group Global Report of Intercos



Source: own adaptation from the 2004 Group Global Report of Intercos

The BSC of Intercos Group comprehends a wide number of IC indicators in all areas, with a main focus on internal area, because of its main role is to translate the broader IC objectives included in the IC report into more detailed objectives. Therefore, the two instruments are related, meaning that BSC provides the necessary degree of detail, breaking up the objectives defined into the ICR in more achievable objectives contained in the BSC and derived by ICR (whose number is reported in fig. 2). BSC has also the aim to control that employees carry out the adequate activities to achieve the objectives, given that a detailed internal management control system is based on BSC.

4. Research results

Both intellectual capital reports and balanced scorecards relate corporate strategy and integrated performance management systems, and they both expand reporting beyond the financial view with categories of customers, processes, and employees. This paper discusses their differences and complementarities based on an analysis of their use in one Italian cosmetic group. Intercos group has published ICRs for three years and implemented a balanced scorecard after the first year of reporting IC. From the analysis of its 2004 IC report, it can be said that Intercos stresses the double scope of the statement as a management tool (intangible indicators are included in the incentive plan) and a communication tool about the firm's knowledge management activities (at Cosmoprof 2003, the major of the cosmetics market, Intercos presented its IC report instead of its products). As regards the BSC, Intercos introduced this tool after the publication of the first IC report in 2002 and use it with an instrumental role, to anchor corporate strategy to single projects and to people's objectives and in order to promote the employees' commitment. BSC comprehends sensitive data, so it is only an internal tool, while ICR has both an internal and external aim. The use of BSC in Intercos was obliged by the consideration that ICR cannot address the operating needs to coordinate the different activities, to detail them and to link the commitment of employees to the corporate aims. On the contrary BSC, due to its features, such as the possibility to include sensitive data, to make explicit cause-effect relationship and the

possibility to be developed at a single project level, can address the organizational needs above mentioned and qualifies itself as a tool linked to the ICR by an instrumental relationship. A comparison of the indicators in the BSC and the ICR reveals that they do not report the same indicators, given that BSC has been developed after the ICR to break down IC indicators. Another important difference is that BSC relates its indicators in a cause-effect relationship, while ICR presents the indicators related to the dimensions of Intercos presentation framework. The study of the case Intercos group found evidence that the two types of extended reporting are different and yet complementary (BSC is included in the Intercos group's ICR) when applied in this firm and that both tools are necessary for firm in measuring IC, given that they address different aims. This includes therefore a marked difference in use of indicators, given that IC indicators in the ICR have to support the overall aims derived by company's strategy, while BSC indicators provides a breakdown of strategic goals with respect to profitability, growth etc.

5. Conclusions

The intellectual capital statement and the balanced scorecard in Intercos group both report issues beyond the financial on customers, processes, and employees, but they do this differently. Using two integrated performance management systems does not seem to be difficult for Intercos group. The ICR is used primarily as a means to develop and communicate the firm's intangible activities, and the balanced scorecard is used primarily as a mechanism to make employees accountable for achieving the company's objectives. In Intercos these models are complementary. The difference in indicators is a consequence of the different purposes of the models. The intellectual capital statement is produced with the purpose of external communication and therefore it cannot contain sensitive data and measures according to strategy and competition. On the contrary, the balanced scorecard is developed with the purpose of internal management of projects and is never intended to be published externally, which makes it possible to include sensitive issues and measures in the model. The main limit of the paper lies in the circumstance that it is based on just a qualitative case studies. In order to investigate on the complementary relationships of these two management tools, many qualitative cases should be studied. The contribution of the paper to the IC literature is to extend the findings of the Bukh et al.'s (2003) study, investigating the hypothesis that BSC and ICR are complementary in reporting intangibles in an Italian group. As for the company analyzed by Bukh's et al.'s (2003), we found evidence that the two types of report are different and yet complementary when applied to Intercos group. Implications of the paper are for company's manager, who increase the awareness to have at their disposal two management tools, addressing different aims, to manage IC.

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SOME INSIGHTS REGARDING CREATIVE ACCOUNTING IN ROMANIAN ACCOUNTING ENVIRONMENT - REGULATORS, FINANCIAL AUDITORS AND PROFESSIONAL BODIES OPINION

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This empirical study reports the results of a survey designed to explore the existence and magnitude of creative accounting practices in the Romanian accounting environment using as a reference point the opinion of some of the top representative accounting professionals like: financial auditors, regulators and professional bodies representatives of the Chamber of Financial Auditors of Romania and also representative of the Body of Expert and Licensed Accountants of Romania.

Since the existence of creative accounting practices are connected in accounting with issues of vulnerability and in some cases panic getting to know its magnitude can be regarded of higher importance. In this respect we were interested to see if our respondents can document its existence and magnitude based on their experience. In order to achieve this goal our methodology employed neutral and direct interviews based on closed questions questionnaire.

The results of our empirical study documented that the credibility of accounting profession in the Romanian accounting environment is not affected by items like creative accounting since all our respondents asserted that is not facile to employ creative accounting schemes in the practice of accounting. One particular question was concerned about the ease of detection of creative accounting practices. In this respect we interviewed our respondents and all had similar opinions that in order to detect those practice skilled professionals are needed and more than that the desire to engage in this demarche since it is not specified particularly in the law.

When it comes to creative accounting schemes that our respondents could identify in their day to day work they shared similar views: items like profit overstatement and profit undervaluation, income tax and leasing can be included frequently in those schemes. On the other hand practices of creative accounting that include goodwill, provisions and developments costs are not found in a significant proportion in the Romanian economic environment.

Keywords: creative accounting, creative accounting practices, credibility, existence, magnitude

JEL code: M 41

Introduction

Nothing is more important or more rewarding in the course of preparing and communicating accounting information that the ability to present it to users and in this context the wording “ability” is representative since this profession is based entirely on professional judgment. Accounting is assessed primarily through its capacity to present financial information for the process of decision making. In this respect objectivity of accounting information is crucial since it should be elaborated under the TFV requirements. The above describe the fair accounting part while all the items that are not included in this category were documented as unfair components that made their presence felt increasingly as empirical studies documented their existence through elaborate evidence (Smith 1992:4-221; Mulford and Comiskey 2002, 2005).

Motivation of the study

Instead of extending the importance of such a topic we bring into attention the opinion of Katherine Schipper (1989:91-102) regarding the importance of getting to know earnings management and pointing out the fact that her opinion can be expanded to our entire study area: "Understanding earnings management concerns one of the central questions in accounting". From that point in time and until the present time its opinion becomes even more appreciated even if it was formulated long time ago and referred only to a small part of creative accounting: earnings management.

State of the art

Creative accounting presented under all its forms of manifestation represents a highly debated subject in the literature with old roots in accounting literature in the debating area. Naser (1993:9) asserted in his book *Creative Accounting: Its Nature and Use*, that manipulation of accounts is an old accounting problem that goes back in the 1920s. The trend of examining creative accounting increased over the years and the interest in examining its existence and the taxonomy of its practices also. Sen and Inanga (2009:27-42) asserted in their study also that creative accounting occurrence increased in many developed countries in recent years. Recent developments (Vinnari and Nasi, 2008:97-116) place creative accounting in the public sector too, defying a general wording according to which creative accounting is present only in the private sector. Erickson, Hanlon and Maydew (2006:113-144) discussing on the demand for research in the area of accounts manipulation discussed about the importance of such a topic and also about the legislative and regulatory changes. Earlier empirical studies documented the existence of earnings losses and decreases (Burgstahler and Dichev 1997:99-126), executive compensation and manipulation (Erickson, Hanlon and Maydew 2006:113-144), off balance sheet financing, creative cash flow and goodwill, manipulated development costs, stock valuation methods, income tax and provisions (Mulford and Comiskey, 2002, 2005), accrued income, depreciations and others manipulated items likewise (Naser, 1993).

Methodology

The methodology employed for our empirical study consisted in the neutral and direct interviews based on a series of 18 closed questions addressed to top representatives of the Romanian regulators, financial auditors and professional bodies' representatives.

The motivation for choosing this particular methodology comprised the fact that we wanted to minimize the discrepancies that exists between the declared opinions and the actual behavior (Chelcea, 2001:124). In this respect we wanted to minimize the biases that could occur. By using this particular path we eliminated any freedom to innovate or changing the actual path of research since our scope of the study was to collect the respondent's opinion (Ghiglione and Matalon 1991:77) regarding a predefined set of questions. The main advantages of this instrument are that we had the possibility to observe the nonverbal behavior, to ensure the standardization of the response condition and to collect spontaneous responses.

The closed questions were developed based on Likert Scale rating the items in a group of judges using 1 to 5 rating scale where: 1 can be defined as *strongly unfavorable to the concept*, 2 is *somewhat unfavorable to the concept*, 3 is used when *undecided* rating item is used, 4 is *somewhat favorable to the concept* and 5 is *strongly favorable to the concept*.

The interview lasted from minimum 25 minutes to 80 minutes with a mean of 55 minutes conducted in the workplace of the respondents and one at the Faculty of Economics and Business Administration from Babes Bolyai University from Cluj Napoca. In Appedix 1 we summarized the list of the interviews, the dates and the duration of the interviews, the person who interviewed the respondents.

All our respondents were Romanian citizens based in Cluj Napoca, except one respondent from Bucharest. All interviews were conducted in Romanian language and both researchers took notes during the interviews. No ambiguous answers were received and all questions had an answer.

Research Design

This empirical study conducted in the Romanian accounting environment reports the main results of a survey that used as a research instrument the interview, focused on the perceptions of regulators, financial auditors and representatives of professional bodies regarding the magnitude of creative accounting practices. Since the empirical studies conducted in the literature documented the existence of creative accounting practices in various economic environments (Jones 1991:193-228; Dechow *et al.* 1995:193-225; Burgustahler and Dichev 1997:99-126; Mulford and Comiskey 2002:2-375; 2005:289-303), the Romanian economic environment is also susceptible of being characterized by its incidence. The perception regarding the magnitude of creative accounting practices may depend firstly on the category that we interview: regulators, financial auditors and professional bodies.

In order to explain if that magnitude has the potential to differ in those particular respondents view in practice of accounting we interviewed 8 respondents involved in accounting regulation and accounting practice in Romanian accounting environment. Our sample was not randomly chosen since we were interesting in interviewing some top respondents of Romanian accounting environment and cannot be considered as being a sample that compressed any statistical path that must be followed in the construction of samples used in a research area.

Findings

Our questionnaire contained as we stated before 18 closed questions. The first five questions assessed the credibility of accounting information when taking economic decisions (Q1: *Can one trust the information compressed in the financial statements when taking economic decisions in the Romanian accounting environment*); the ease for a company to employ creative accounting schemes (Q2: *Can be considered facile for a company to employ creative accounting schemes in Romanian accounting environment*); the ease to detect those schemes in general (Q3: *Can be facile to detect creative accounting schemes*); the role of professional bodies and regulators in fighting creative accounting (Q4: *The role of the professional bodies and regulators is essential in fighting creative accounting schemes*) and the role of financial audit in fighting creative accounting (Q5: *The role of the financial audit is essential in fighting creative*). The 13 questions remained tested for the magnitude of some of the most cited items of creative accounting practices or techniques of creative accounting as it is presented in table 2.

The results for the first 5 questions are presented in table 1 as following:

Table 1. Credibility of the accounting information, ease to employ and detect creative accounting practices and the role of regulators, professional bodies and financial audit:

Questions/Respondents	Financial auditors	Regulators	Professional bodies
Q1	FA 1, FA 2 /4	R 1, R2, R3/ 5	PM 1, PM3/4; PM2/5
Q2	FA 1/3; FA 2/4	R 1, R3/ 1; R 2/2	PM 1, PM3/2; PM2/2
Q3	FA 1/2; FA 2/4	R 1, R3/ 2; R 2/3	PM 1, PM3/4; PM2/2
Q4	FA 1, FA 2/4	R 1, R3/ 4; R 2/5	PM 1, PM2, PM3/5
Q5	FA 1, FA 2/3	R 1, R3/ 3; R 2/4	PM 1, PM2/3, PM3/5

Source: Projection of the authors]

When it comes to assessing the answers received for our first question one interesting aspect can be discussed and that is related to the fact that only the professional bodies and the regulators asserted that one can trust fully in the accounting information. In their vision the “financial

statements are constructing under the principle of TFV and should be no place for misjudgment” as PM 2 asserted.

FA 1 consider that “ we cannot say that we can trust 100% of the information that is comprised in the financial statement but on the other side we can never say that this particular information is always characterized under the creative accounting influence how some international studies documented”. R2 in this respect admits that accounting information can be manipulated but the incidence is not high. The second question shared contradictory answers as the financial auditors considered that is not difficult to employ creative accounting schemes in the Romanian accounting environment while the latter categories strongly disagree with this. R3 asserted that „ the mirage of creative accounting is beautiful but how much can we talk about creative accounting indeed and how much can we talk about the desire of doing that”. The third question was the only one that received only the strict answers with no additional information on behalf of the regulators. FA 2 asserted that „the detection process of creative accounting schemes must be judged according to the experience of the person that analyzes one accounting item”. PM 1 and PM 4 asserted that is easy to detect those practices “as long as the person that follow this demarche is interested in this” (PM 1) and “you just need the right person to detect them” (PM 3). The role of regulators and professional bodies in fighting creative accounting was considered very important since all respondents were strongly agreed. FA2 declared in this context that “the accounting practices that do not lead to TFV must be inhibited through accounting regulations and that is an ongoing process that never ends”. PM 3 asserted that „everybody must fight creative accounting. I see it only through a spectrum of negativity. We are all responsible for constructing the credibility of the accounting proffesion and for that reason we all must limit unfair practices”.

The role of the financial audit in fighting those practices was seen as not essential by the financial auditors itself. The latter categories strongly agreed. In this respect PM 3 asserted that “when we discuss about the financial audit and creative accounting the answer may appear as simple, but is complex. We have noticed that every time creative accounting practices are discovered, financial auditors are to be blamed but the truth is that this is not their responsibility to detect that. They must verify for the legality of the accounting information not for items of morality particularly”. Table 6 combined schemes of creative accounting documented in the literature (the references are the ones above). Some of them were presented to the respondents in order for them to assess the frequency that they head or found the item in their day to day work.

Table 6: Schemes of creative accounting and their magnitude in the Romanian accounting environment:

Schemes of creative accounting	Financial auditors	Regulators	Professional bodies
Profit undervaluation	FA 1, FA 2/4	R1, R 2, R3/5	PM 1, PM 2, PM 3/4
Profit overstatement	FA 1, FA 2/4	R1, R 2, R3/4	PM 1, PM 2, PM 3/4
Income tax	FA 1, FA 2/4	R1, R 2/4, R 3/5	PM 1, PM 2, PM 3/4
Depreciation	FA 1/2, FA 2/1	R1/2, R2/1, R3/3	PM1, PM2/2, PM3/3
Provisions	FA 1, FA 2/1	R1, R2, R3/1	PM1/2, PM 2, PM3/1
Goodwill	FA 1, FA 2/1	R1, R2, R3/1	PM1/2, PM 2, PM3/1
Prepayments	FA 1/4, FA 2/2	R1, R 2, R3/4	PM 1, PM 2, PM 3/2
Accrued incomes	FA 1/4, FA 2/2	R1, R 2, R3/4	PM 1, PM 2, PM 3/2
Adjustments	FA 1, FA 2/1	R1, R 2, R3/1	PM 1, PM 2/1, PM3/2
Leasing	FA 1, FA 2/4	R1, R 2, R3/4	PM 1, PM 2, PM 3/4
Development costs	FA 1, FA 2/1	R1, R2, R3/1	PM 1, PM 2/1, PM3/2
Off balance sheet schemes	FA 1, FA 2/1	R1, R2/1, R3/2	PM 1, PM 2/1, PM3/2
Stock valuation methods	FA 1, FA 2/1	R1, R2/1, R3/2	PM 1, PM 2/2, PM3/3

Source: Projection of the authors

As it can be observed from table 6, some of the techniques of creative accounting are present in the Romanian economic environment and as it can be concluded based on their answers in a higher proportion. Those schemes of creative accounting are the ones that include: profit

underestimation and overstatement, income tax and leasing manipulations. Other items that are present in a higher proportion (Smith 1992:4-241; Mulford and Comiskey 2002:2-375) in other economic environments like stock evaluation, off balance sheet, developments costs are somehow inexistent in the Romanian economic environment based on the respondent's answers. When it comes the creative accounting schemes that are developed based on provisions we cannot assert that those are present in our economic environment since none of the respondents declared it as being present. Regarding to this item all respondents asserted that Assistant Lecturers of accounting information don't use provisions even if from a legal point of view they have this possibility. Also none of the respondents declared that they could found in their day to day work an item like goodwill included in a scheme of creative accounting. In this respect PM1 asserted that "I have heard of cases like those where this item was used creatively but I personally didn't found in my work this situation".

Conclusions

In the Romanian accounting environment the credibility is the accounting information has described by our categories of respondents as being high which is not surprisingly since two of the categories are directly responsible for constructing the credibility of the accounting profession. Contrary to the international studies results (e.g. the above cited sources) our respondents asserted that is difficult to employ schemes of creative accounting and the detection process of those scheme involved skilled professionals. The role of regulators and professional bodies is important in limiting its incidence. Profit overstatement and undervaluation, income tax and leasing manipulation are found in the Romanian accounting environment while others techniques of creative accounting that involve goodwill, or developments costs weren't documented by our respondents.

Further developments and scope for future research

Having the fact that this research instrument may offer multiple advantages we intend to use it in our future research but to apply only the interview without combining it with the questionnaire, leaving in this respect room for creativity and also for no influence at all. We intend to use a larger sample and to develop a more robust study at a national level including respondents from each category plus two new categories: Assistant Lecturers and financial analysts. Also from a lack of space we couldn't approach on a higher scale the additional explanations that our respondents gave so in a further study we intend to discuss this part too since that could explain better their opinions.

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Appendix 1 – List of interviewees

Category of respondents	Abbreviation	Duration	Month	Day	Year	Researcher
Financial auditor 1	FA 1	45 min.	Dec.	12	2010	Alina B. Vladu
Financial auditor 2	FA 2	30 min.	Apr.	30	2011	Alina B. Vladu
Professional bodies member 1 (Representative of the Chamber of Financial Auditors of Romania)	PM 1	25 min.	Jan.	18	2011	Adrian Grosanu
Professional bodies member 2 (Representative of the Body of Expert and Licensed Accountants of Romania)	PM 2	70 min.	Jan.	20	2011	Adrian Grosanu
Professional bodies member 3 (Representative of the Body of Expert and Licensed Accountants of Romania)	PM 3	80 min.	Feb.	11	2011	Adrian Grosanu
Regulator 1	R 1	80 min	Feb.	17	2011	Alina B. Vladu
Regulator 2	R 2	40 min.	Mar.	10	2011	Alina B. Vladu
Regulator 3	R 3	65 min.	Mar.	30	2011	Adrian Grosanu

DETECTION OF EARNINGS MANAGEMENT – A PROPOSED FRAMEWORK BASED ON ACCRUALS APPROACH RESEARCH DESIGNS

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The scope of this theoretical research is to outline recommendations for improving the complex process of detection of accounts manipulation. In this respect we turned to the previous literature and assessed empirical studies in order to be able to develop a robust model for understand the process of detection for accounts manipulation and further to ease the path of detection by proposing as we stated above a theoretical framework in this respect. Since there is a constant conjecture between cause and effect we are able to assert that two direction of research can be identified and both can explain further the roots for limiting earnings management since its detection can be much easier approached: the event that can represent the root for accounts manipulation and the normal trend considered for a certain company related to the accruals level and economic trend. In the end if we know the cause we can interpret the event and combat its appearance. But when this kind of research appears, another question springs. Should we fight earnings management practices? Clikeman (2003:78) sensed that by using those practices companies are walking on a very slippery slope where minor accounting gimmicks become more and more aggressive until they create material misstatements in the financial statements. So, the recourse to such practices creates a stake that is not negligible. The users of financial statements are misled when making decisions based on manipulated accounting numbers. To a certain extent, the existence of earnings management distorts the usefulness of financial statements, and in this respect the process of detecting it can be regarded both as being important and challenging. Our proposal is not related to a technical process of detecting earnings management as typical empirical studies found in the literature and more than that we open a new stream of research based on understanding the forms of manifestation for accounts manipulation, getting to know the antecedents, the features, the possible interactions among antecedents and current features. Based on the recommendations found in the literature the eradication of manipulative processes is next to impossible but the limitation can be a reality. In this respect the researchers recommend controlling the conditions and motives that increase the likelihood of its presence and also developing stronger tools to detection.

Keywords: earnings management, accruals

Cod JEL lucrare:M 41

Introduction

This particular study represents the first step of a larger empirical study that will assess the credibility of the accounting information presented into the financial statements in the Romanian economic environment. Into the present study we intend to analyze the paths of detecting accounts manipulation with a scope of developing a general framework for better understanding this complex process.

The existence of earnings management practices under all its forms of manifestations is possible under the aegis of various factors that work together as a whole in order to permit its appearance. By reviewing the literature we are able to elaborate a framework that has a genesis point the influence of those factors explaining in this respect the context of appearance for manipulating

behaviors. This demarche is realized as a consequence of the fact that psychology-based research indicates that learning and subsequent judgment is facilitating by knowledge frameworks and availability of examples.

Motivation of the study

The importance of the study is underlined by the interest of the investors and other contracting parties in assessing the possibilities of detecting unfair accounting information.

The present study presents a different view that the traditional view of detecting accounts manipulation, based on qualitative and quantitative information.

The main idea of the study was constructed based on the shortcomings evoked by the empirical studies that conducted various quantitative methods trying to assess the magnitude of accounts manipulation but didn't explained the detection process which is a very complex process with psychological accents that put in connection always the cause and the effect. In the end if we know the cause we can interpret the event and combat its appearance. Based on the recommendations found in the literature the eradication of manipulative processes is impossible to conceit but the limitation can be a reality. In this respect the researchers recommend controlling the conditions and motives that increase the likelihood of its presence and also developing stronger tools to detection (McBarnet and Whelan 1999: 272). In detecting earnings management practices the objects of manipulation and the actions undertaken in order to achieve it also must be known. Also the magnitude of interventions that management actually makes to influence earnings is relevant for the inference of earnings management in an empirical context.

State of the art

The general trend found in the literature regarding earnings management manipulation is related to the fact that managers may manage net income by controlling various accruals. Accruals such as accounts receivables, inventory and accounts payable are discretionary in that they allow for some flexibility by management to control. A manager may decide to become more optimistic about warranty claims on its products its current year than in previous years to decrease the accounts payable and accrual liabilities thereby increasing reported net income. Since accruals management is less obvious and detectable than changing accounting methods that have to be explained in the financial reports by explaining every material change in the accounting treatment together with an estimation of how much difference it makes; the management make use of them more often then they use changing accounting methods for manipulating of accounts.

Accrual accounting theory is based on the idea that there is a difference between cost and expenditure versus benefits and revenue. In this context net income is seen as adjustments of the operational cash flow for transitory items resulting in net income from operations. All the adjustments involved are called accruals. Accrual accounting is considered open to manipulation, as we stated before, having the fact that comprise various subjective decisions taken in the allocation of expenditure and revenue over time. By getting to understand the magnitude of earnings management practices we should identity the objects or the main instruments used in order to perform the manipulative behavior. This demarche is very important since this step represent the roots of constructing our theoretical framework.

In the following table we summarized some instruments and objects identified in the literature, presenting in the same time the methodology used by previous researchers in order to assess the existence or the magnitude of earning management income practices. Those studies are empirical studies and the main goal was to detect earnings management practices by identifying the objects that were managed.

Table 1. Instruments and objects of earnings management practices identified in the literature and presented in chronological order with related methodology

Authors	Year	Studies	Instruments/Objects	Methodology used
Barua A., Legoria J., Moffitt J. S.	2006	<i>Accruals Management to Achieve Earnings Benchmarks: A Comparison of Pre-managed Profit and Loss Firms</i>	Accrual management	Modified Jones (Dechow et al., 1995) model after adjusting for performance (Kasznik (1999) model), Logistic Regression model.
Frank M. M., Rego S. O.	2006	<i>Do Managers Use the Valuation Allowance Account to Manage Earnings around Certain Earnings Targets?</i>	Income tax accrual, Deferred tax asset valuation allowance account	Multivariate regression tests, Crossover Analysis, Sensitivity Tests, Altman's Z-score, Cross-sectional regression.
Leach R., Newsom P.	2007	<i>Do Firms Manage their Earnings Prior to Filing for Bankruptcy?</i>	Current accruals	Cross-sectional regression.
Wilson M., Shailer G.,	2007	<i>Accounting manipulations and political costs: Tooth & Co Ltd, 1919-1965</i>	Reported profit in relation to internal records and the pattern of accruals	Cross-sectional analyses of large samples using coarse data.
Athanasakou V. E., Strong N. C., Walker M.	2009	<i>Earnings management or forecast guidance to meet analyst expectations?</i>	Non-recurring items, unexpected core earnings	Logit regression, multivariate models
Chin C-L., Chen Y-J., Hsieh T-J.	2009	<i>International Diversification, Ownership Structure, Legal Origin and Earnings Management: Evidence from Taiwan</i>	Discretionary accruals	Least squares (OLS) regression analysis of discretionary accruals, White adjusted t-statistic (White, 1980).

Source: Projection of the authors

In detecting earnings management practices the objects of manipulation and the actions undertaken in order to achieve it must be known. Also the magnitude of interventions that management actually makes to influence earnings is relevant for the inference of earnings management in an empirical context.

Methodology

By positioning our research in this large field we can say that this particular research is focused on every area of accounting field. The method applied consist in a analytical method, the most suitable to use in this type of research according to Macdonald and Rutherford (1989:89) that

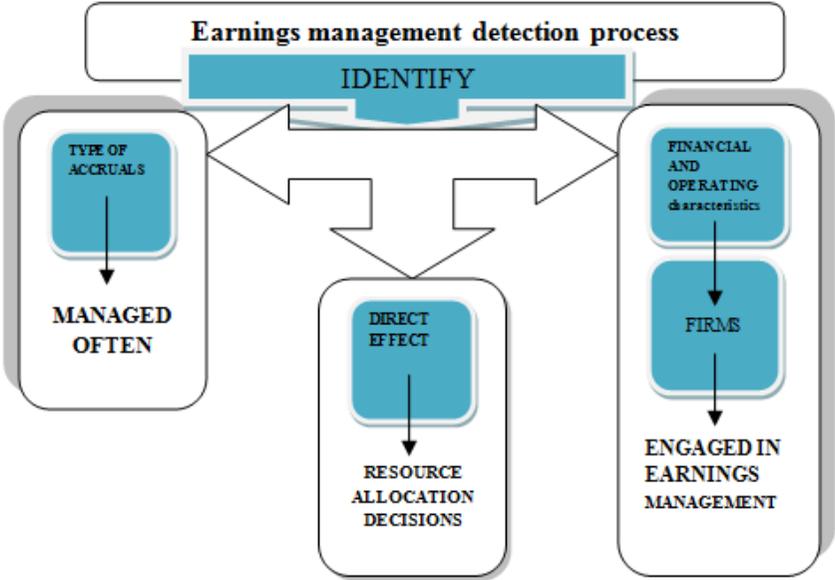
asserted that when constructing a model from assumed or observed relationships, analytical methods must be used. As type of research our paper can be included in the theoretical research type which importance was underlined by Kothari (2001:106) who asserted that: “empirical research is (or should be) informed by theory, since interpretation of empirical analysis is impossible without theoretical guidance”. Ronen and Yaari (2008: 289) underlined the importance of both types of research and concluded that theoretical research benefits from empirical research having the fact that: “an analysis is conducted through modeling, which by definition admits only a few features of reality”.

A Proposed theoretical Framework for detecting earnings management

In our vision in detecting earnings management behavior is important to follow at least three directions. The first step comprised the identifying process of the most managed accruals (in order to do so the incentives for managing earnings must be assessed). In this respect the object that can be susceptible of manipulation must be known based on the company trend. Also the context in which the company activates is important. Features like: dearth of regulations; any change in accounting treatment noticed by the auditors; any new growth of profit after arrival of a new chief executive or finance director; unusual change in the trend of sales growth or profit margins; unusual increase in debtor days or stock days; large acquisitions; discrepancy between reported profits and operational cash flow that employ differences that persist for period after period. All those must be followed by the examination of the magnitude of earnings management direct effect on resource allocation decisions having the fact that earnings management may have adverse effects on resource allocation decisions by investors and creditors, with far-reaching consequences. The last step comprises the identifying process of the financial and operating characteristics of the firms that are engaged in earnings management activities based on our opinion.

The following figure may represent the starting point in shaping our proposed framework.

Figure 1. Framework for understanding earnings management detection process

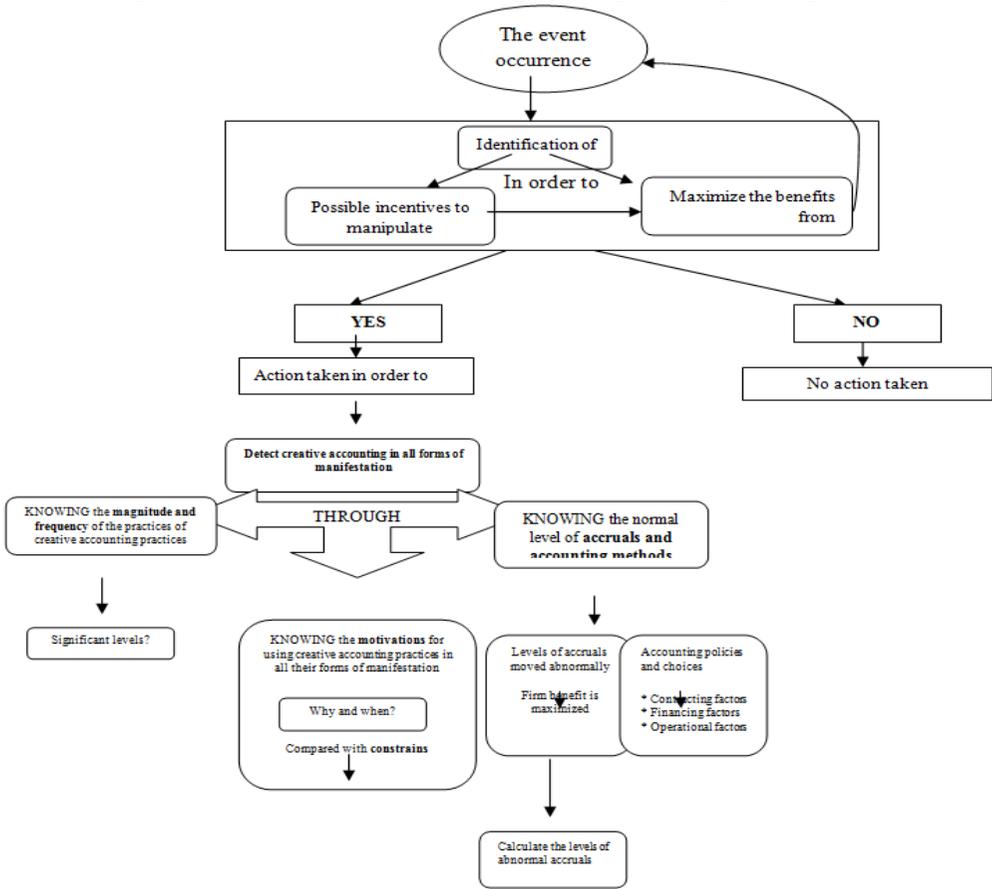


Source: Projection of the authors based on Healy and Wahlen (1999) conceits

The event occurrence is related to the opportunity that can arise in different periods of time in a firm's economic cycle. By identify the possible incentives to manipulate accounts in order to maximize the benefits from the event occurrence the manipulative behavior can be understood. Once examined the possible incentives and concluding regarding their existence the detection may be closer to realize. In order to be able to detect possible earnings management practices in all its forms of manifestation three simultaneously directions can be outlined as following. The magnitude and frequency of the practices of earnings management in all its forms of manifestation must be assessed. If those practices are encountered to have significant levels then the detection will be a success.

The second direction is materialized in the process of finding the main incentives or motivations for using earnings management practices in all its forms of manifestation. The main questions that may arise are: `` Why does practices are needed?`` and ``When those practices are used?``. The motivations for using creative practices need to be compared with the existence constrain in order to assess the degree of which firms may escape regulatory and publicity sanction. A low level of constrains may induce a high level of motivations or incentives. The third direction of research is focused in detection of the main accruals used in order to employ earnings management practices and all its forms of manifestation and the main accounting policies and choices design to achieve its goals and concretization of its incentives. In this respect Table 1 can offer some insights into the results documented by previous empirical studies. Table 2 present our proposal.

Figure 2. Framework for detecting earnings management process:



Conclusions and scope for future research

The transactions of a certain company can be structured in such a way that in the end reported earnings are reduced or enlarge, depending on the management *intent*. In this context the managerial *intent* is the genesis point that makes the whole mechanism of structuring transactions to be developed and old habits to change. According to the framework that we have proposed for understanding what a detection process of accounts manipulation should comprise, a logical “red thread” must be followed based on the context in which the company activate in order to assess what kind of actions can be taken and in this respect to be able to ease the process of detecting earnings management. As we stated above this study represents a first step into assessing the most suitable path to follow when judging the process of earnings management detection. Based on this framework we intend to develop an econometrical model that can simulate various detection processes in order to improve the present research designs for detecting earnings management.

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SECTION: MANAGEMENT AND MARKETING

SUB-SECTION: MANAGEMENT

OBJECTIVES, PERFORMANCES, RESULTS – VIEWS ON THEIR USE IN THE PUBLIC ORGANIZATIONS FROM ROMANIA

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The present paper focuses on the management associated with relatively common concepts: objective, result and performance (ORP). The study is important because in the Romania of the year 2011, a “state reform” is being planned, which will substantiate into the reorganization of public institutions, as the improvement of their activity is set forth by utilizing the set of tools associated with the aforementioned concepts.

The study represents an analysis related to the use of the set of management tools associated with the aforementioned concepts within the Romanian public organizations. The study is concerned with a qualitative estimation involving the translation of the existing theory into the practice of the present moment.

The review of the specialized literature is aimed at selecting the most common theoretical milestones, in order to increase the probability to retrieve them from the practice of the organizations. The works of Drucker represent the first theoretical system of reference. The way the ORP concepts have been utilized within the American organizations generate the guiding elements of the present study.

The research presents a longitudinal segmentation, the frontier between the two parts being the present moment. The current state of facts is studied by means of an inductive approach. The hypothesis related to the ORP management in the near future is actually built on the grounds provided by the estimation of this state of facts. Its deductive approach starts from evaluating the pragmatic premises, involving the support of the process that will utilize the ORP in the near future, according to the theoretical percepts. The analysis is qualitative in nature. The identification of the cases that represented “the exception” was taken into account.

The analysis focused on public institutions considered a priori as more transparent: the university, the hospital and the town hall. Even if in the case of the university there are regulations that facilitate the strategic planning, the utilization of objectives according to the MBO precepts is absent. The same situation is to be found in the case of hospitals and town halls. The use of primary and secondary information sources prove that the ORP has not been utilized. It was ascertained that the premises for utilizing the ORP are the same for the near future, a fact that implies the same results.

The main implication is associated with the “myth or reality?” question. The result has a demystifying impact, showing that a reliable estimation on the ORP basis related to the activities of or people working in these organizations cannot be developed nowadays - in 2011.

The present study aims at a realistic analysis related to the discrepancy between words and facts within the management of the Romanian public organizations. The fact that the aforementioned organizations represent the object of the “management of shallow labels content” is signaled and demonstrated.

Key words: objectives, MBO, results, performance, public organization

JEL Codes: H11, I00, I23, L31

I. Introduction

The present-day economic crisis has augmented the segment of public opinion which is favorable to a critical analysis of the activity developed by the public organizations and by the public sector as a whole. The phenomenon is more than obvious in Romania, where salient transformations of the public sector occurred during the last two decades and where the major problems associated with the management of the public organizations persist. The dominant impression expressed explicitly and implicitly is that the public organizations involve too many resources, in order to develop activities whose results are prone to be criticized.

Being studied from the point of view based mainly on the principles of the new public management, the problem generated by the malfunction of these organizations focused mainly on the analysis of costs associated with the expected results. Even the shift of interest from processes and procedures to results represents a significant change in the management of these organizations. The advocates of this change of attitude, a change synthesized by Osborne and Gaebler (1992: 108-166) by means of “mission-driven government”, consider that in this manner the entrepreneurial approach is encouraged.

The pressure to implement a management guided by results and economic criteria is amplified by the consequences of certain unfavorable economic evolutions. In Romania the need for a critical analysis becomes obvious.

Even if there is a macroeconomic context which is favorable to this managerial approach, the expected success is determined by the understanding of the specificity related to the public sector. It cannot be omitted that, in theory, there are more important matters than the economic ones in guiding these organizations, while in practice there is the experience of many centuries which validates their existence and their manner of work.

II. Present-day concepts and practices

If the discourse of the people involved in reform of the public sector and organizations is followed carefully, it can be ascertained that there is an ambiguous manner to use of the terms objective, result and performance. The alarming aspect is generated by the fact that these confusions substantiate in public policies whose consequences are, of course, negative. The effect may be amplified if the terms are associated with certain management practices which are transferred from private organizations to the public organization.

In this respect, the management by objectives (MBO), the managing for results (MfR) and the performance management (MP) belong to the category of management tools on which hundreds of works of all types have been published. They have a different content because in the first place, from a detached point of view, the objective, the result, and the performance stand for different concepts. “The objective” relates to something that is to be accomplished, “the result” is a consequence and “the performance” represents the outstanding or the best result. On the other hand, the quantification of the objective is desirable as the quantification of the result represents a compulsory condition that involves the opportunity to discuss the performance. Taking into account these common observations based on the dictionary definitions of the respective terms, one can appreciate a “chronological sequence” of the discussion as logical, if related to the objective-results-performance type.

The management by objectives, MBO, is ascribed to Drucker (1954). MBO is associated mainly to the planning, being adopted after 1975 as a tool of strategic management. In this context, the objective embodies the mission of the organization. The rapid utilization of MBO by certain companies has generated a number of situations which imposed critical observations and methodological corrections. Drucker (1954; 1974) emphasizes that a system of objectives represents a necessity, and this system must be developed in a balanced manner, by avoiding certain exaggerations related to the role played by the profitability. By extension, it can be

inferred that this warning is valid in the case when the role of economic objectives are being exaggerated. However, in 1974, an international conference dealing with the MBO topic showed that 80% of the American companies use this instrument, not more than 3% doing it in a correct manner (Schuster and Kendall 1974). What is more important for this study is that the conference questioned the applicability for specific fields.

“Managing for results” (1964) is one of the Drucker’s works discussing “the business realities”. This book, which has generated an instrumental approach, focused on the individuals who were initiated in the business management but, however, certain “realities” may be perceived from the point of view of the management involved in other types of organizations. For instance, the idea that the resources and the results exist outside the organizations is worth to be understood and adapted to the public organizations. In this manner, it is suggested that the effort should be focused on the outputs/results.

As in the preceding cases, the performance management referred to the organization follows different “trajectories”, corresponding to the private and the public sector. In what the private sector is concerned, the performance of the organization is associated with a minimal limit of profitability which implies its survival. In the case of the public sector, the performance of the company hasn’t been associated with its survival. Due to political and social context, almost all the public organizations have been kept in function, without being affected by the appraisals of their results or performances. The continuity of their function has been considered in itself a positive result, despite the costs perceived as irrational.

Taking into account the main area where the theory was associated with the discussed concepts and the fact that most of the discussions promoted at a global scale are linked with the North American economic and social space, an estimation of the pragmatic results of the public sector becomes compulsory. From the time intervals needed to implement the strategy and then achieve certain results and from the problematic created, a series of particularities or consequences of the utilization of the respective management tools can be inferred. A source of this type, available in Romanian, is Henry (2005: 416-613). Henry’s textbook focuses on the US public administration, making available certain moments and data with a statistic value that offer an image of the significant elements. MBO was promoted in the American administration during the seventies. Other combinations objectives-results-performances followed a fact that generated more sophisticated public management instruments, known under different acronyms.

Finally, for this study the following facts can be taken into account:

- before the “official moments” concerning the discussed instruments it existed a practice that guided the elaboration of the theory related to their utilization;
- the utilization of instruments is promoted and experimented by some governmental agencies and the results are quantified and then made available for public discussion;
- the instruments are improved continuously, under the pressure of constant criticism and objective appraisals.

At the beginning of the nineties, after five decades of efforts to improve the public sector management in the USA, it was ascertained that the capacity of the government to estimate the performances, on a scale from 1 to 10, reached the level corresponding to the figure 2 on the named scale (Henry 2005: 448-449). An appraisal developed in 2002 and related to 26 federal agencies according to two criteria registered one maximal position for one organization, while half of the organizations scored at the minimum level while all the criteria were concerned.

Extending the study to other geographic areas, it can be ascertained that the theoretic bases and the practice associated with the ORP triad suggest a cautious and flexible approach, due to the dilemmas that appear in relation with the specificity of the public organizations. For instance, Pollitt and Bouckaert (2000) discuss the reform of the public management, using the titles “The results – through the blurry mirror” or “The results: a slippery concept”. Even in this context, it is

obvious that the various governments (of the OECD countries) interested in the matter attempt mainly transparent and gradual approaches, accompanied by projections of the consequences with a multitude of disapproving reactions at the public level.

In Romania, the discussion involving the strategic planning and implicitly the utilization of the mission and objectives in the public sector began more than 10 years ago. Brătianu and Lefter (2001) offer a discussion of the planned utilization of the objectives and of other strategic instruments in the universities. In practice, the fact that an institutional degree is afforded to a university by a public agency marks the implementation of minimal elements of performance.

III. Methodology

The study is aiming at an analysis with a retrospective character, on which is based a projection valid for the next years. This temporal orientation with two segments allows the use of two different approaches, which are connected by the idea of a construction with a preventive role.

An inductive approach was used for the last period of time. The approach was based on the collection of some qualitative data related to the utilization of the ORP triad within the framework of a public institution from the non-profit category, these institutions offering a higher transparency. The institutions belonging to the education, health and local administration systems were preferred. The analyzed elements were obtained via observation and were extracted from the different sources, which are available for public use due to the organizations websites, or were inferred from the events and operational processes. A special attention was paid to the elements with a “dissonant” character from the amount of collected data. Their estimation represented the appraisal of the agreement between the real state of facts and the data registered in the official documents.

The accomplishment of this inductive phase is substantiated in an assertion with a theoretical value. The research hypothesis is built on its basis, in order to realize a prediction associated with the next interval. A part of the collected data for the last period of time was used in order to test the hypothesis related to the manner the management instrument in discussion will operate in the near future.

The research strategy represents a mixture of case studies at the organizational level for several institutions from the fields which were mentioned previously. These case studies focus only on the elements related to the ORP triad. The chosen organizations represent a sample consisting of typical cases, but taking into account whichever event leads to “an extremely positive case”. “The extremely positive case” is represented by a confirmation in practice of the “textbook theory” associated with the ORP topic.

The methodology of data collection has included, beside the utilization of the secondary sources, the unstructured exploratory interviews and the direct observations which focused on the respective organization and on its executives.

Finally, the deductive reasoning implies a construction with a predictive character associated with the conclusions. The translation of the inductive sequence into an ulterior deductive sequence is based on the phenomenological continuity assumption, when elements that prove a certain discontinuity do not occur, as the ones involved in the catastrophe type .

IV. Findings

When taking into account the mentioned difficulties concerning the correct implementation of the MBO, the first public institution analyzed was the university. This institution is compelled to elaborate a mission statement and a strategic plan. On the other hand, it can be assumed that the university is the institution which has acquired the theory.

The analysis began with the study of the strategic plans and university charters which were made available on the websites. After studying the plans of 40 public universities, it was ascertained

that the objectives are formulated in a rather ambiguous manner, a fact that suggests a desideratum related to a process. The terms used are “increase”, “accomplishment”, “improvement”, and so on. No example where the objectives were formulated in a SMART (Specific, Measurable, Achievable, Realistic, Time related) structure was found and neither certain supplementary characteristics. The measurability was carefully avoided and the obligation to report in a determined period of time was inexistent. The term “permanent” occurred frequently as a formulation associated with the time related to an objective labeled as “improvement”. The interviews showed that the academics don’t assume the objectives deriving from the objectives of the organization. As a matter of fact, there are no elements to prove the existence of an MBO in the universities.

The orientation toward results and their appraisal within the universities is associated only with the research activities accomplished by academics. Each university establishes a minimal threshold concerning this type of results. Probably more than 90 % of the academics reach this threshold, a fact that proves that this threshold is not operative.

In what the “outputs” of the educational process are concerned, there is no serious system of assessment concerning the graduates’ success on the market, even if the accreditation of certain programs of studies supposes an assessment belonging to this type and this specific criterion is acquired in almost all the cases. The universities are categorized according to an aggregated indicator of qualitative type, labeled as “degree of trust”. There are no reasonable Romanian classifications to match the type used in the Western Europe or in the USA.

Finally, two separate “events” have tested indirectly the existence of a management based on the ORP triad: the “legal” reduction of the academics’ income during the year 2010 and the change, starting with February 2011, of the rules and procedures which deal with recruitment of new teachers. The lack of institutional reaction to events that endanger the autonomy of the organization’s management is obvious, no special situations being signaled.

In the case of the local public administration, one can ascertain the same ambiguous expression. Due to the enforcement of law, all the town halls have been determined to elaborate a plan with the title “strategy of sustainable development”. This plan is available on the official website of the town hall, the plan being more developed in the case of bigger cities. Without taking into account the volume of the named plan, the objectives were expressed in a rather ambiguous form. The results of the unstructured interviews emphasized the lack of any concrete elements when a time interval longer than a semester is concerned.

As in the case of the universities, the reduction of public clerks’ salaries and the diminution of the personnel working in the town halls, with uniform percentages for all the organizations, revealed the fact that there is no coherent approach which relates to the theory of the topic. The negotiations at the hierarchical level, the assessment of results which are relevant for the organization, or the comparison used in order to estimate the performance were not to be found. However, it can be admitted that there was established a target of budgetary nature, whose significance is obscure in the lack of a transparent argumentation coming from the government.

An interesting situation from the point of view of results is related to the organizations belonging to the public health system. In this area, there are a significant number of result or performance indicators, most of them having the characteristic “maximal threshold” and being related to costs. As a matter of fact, the significant indicators have an economical character, being dictated by budgetary constraints coming from the central administration. In what this matter is concerned, the results of the interviews show that there is no reliable proof of using a range of management instruments associated to the ORP triad.

Finally, the reduction of salaries and the reshaping of the health system represent supplementary reasons that prove the management using these instruments doesn’t live up to its role in the area related to the health system.

It can be also inferred that the system of wages related to the named institutions became more rigid due to the effect of the “unitary wages law” elaborated in 2010, which decreased the margin of the employees’ positive motivation, increasing instead their negative motivation, as a result of the new legislation related to the work market. The effect of these laws, corroborated with the budgetary targets and other strategies of financial nature, which are decided and applied in very short periods of time, have drained of its real content the MBO, MFR or PM in the studied public organizations.

V. Conclusions

All the formal elements related to the elaboration of plan-type documents, in what the three institutions under discussion are concerned, refer to the concept “objective”, but in all these cases there is no proof for operating with a SMART type form, or a form which should allow the measurement or operation within a control system. The existence of guiding elements belonging to the costs is not encompassed into a systemic construction which should involve a higher amount of objectives. Even if there are a number of prescriptions, sometimes in a fuzzy form, for formulating the mission or other documents for planning, nothing similar has been developed for the objectives, although the specialized literature offers several models and discussions.

In the practice specific to the organizations under discussion, there are no events able to represent in an indirect manner, by consequences related to their position (e. g. penalties), the proofs of utilizing an MBO type system. An objective such as “compliance with the budget”, which is achievable by reducing the activity and by actually creating an operational discontinuity, cannot be validated as a proof to certify an acceptable managerial orientation for the public organizations. Even the “directional goals” such as “increase”, “improvement” etc. are not to be found under forms which can be translated in practice within departments or positions.

The absence of the objectives triggers the post-factum character of any findings related to results. Actually, a complex set of results has been discussed that offers an unsubstantial image related to the activity of the organization. As regards the institutions analyzed, most of the universities close the year with substantial budget excesses, while the majority of hospitals fit into the opposite category. Almost all the published results represent the consequence of activities which are irrelevant for the basic process defined in the mission of the organization, or are concerned with the “output” of certain compartments and positions, without reflecting the consequence of a specific coordination, which should be able to provide a significant impact on the management style specific to the organization.

In a similar vein, this is also the case for using performance as a means to achieve a systematic improvement of the activity. Even if there is a tendency to compare the activity of similar organizations, the various classifications in Romania are questionable or of little relevance as compared to what are regarded as essential in the mission statement.

As compared to the past activity cycles of the institutions considered, it can be stated that a coherent application of a certain form of management - on the grounds of the ORP triad, in the sense of the reference theory – has not been signaled. The probability that other public institutions, less taken into account by mass media and by theoretical studies, would use certain strategies belonging to the MBO type is insignificant, because there are no regulations in this respect, and the practice does not reveal events of this type.

The inductive assessment related to the past and present cycles and to the premises of the same type associated with the category of processes guided by ORP allow the deduction that, in the near future, the estimation and control related to the activities of public organizations are not likely to develop in a coherent manner, by using the associated management techniques.

Due to the fact that the organizations do not utilize the ORP tools, the planned assessment of the employees or of certain organizational entities on these grounds has turned into the evaluator’s

arbitrary act of power with questionable consequences on the results that could prove relevant for the organization. As a matter of fact, following the same deductive reasoning, the consequences can only be negative for the management within a modern reference system.

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PUBLIC-PRIVATE PARTNERSHIP IN COMMUNITY DEVELOPMENT. THE CASE OF ROMANIA. CONCEPT AND MANAGEMENT.

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The public administration has a major role in partnerships establishing and operating with different community actors aiming at solving specific community problems. In the process of identifying and solving the community problems the actions of the non-governmental organisations are considered as “alternatives” to the solutions of the public administration.

The advantages of an on-going collaboration between non-governmental organisations, as relevant agents in the social economy, and the public authorities aiming at solving the community problems were identified and acknowledged by both sides representatives. The access to complementary resources, and implicitly, an increase in the range of actions of the partners beyond mathematical calculus, an increase in the credibility and public image of the partners, as well as the social benefit corollary to positive models established within the community, are only a few of the arguments. The question raised is why this type of a more consistent approach is not used in the current practices of solving the community issues in Romania. The following causes should be considered in response to this question: the lack of an associative culture at the level of all potential partners, the access to resources is by far too limited on behalf of any of the two parts involved, a neutral, thus, unrestrictive legislative environment, but at the same time, unstimulating towards an associative action, i.e. limited management capacities on both sides.

From this perspectives, this paper aims at clarifying the partnership concept (definition, typology), the public-private partnership role in solving community problems and the management issues related: partners identification, negotiation of the cooperation protocol, decision making process and resource management, assesment, etc.

Key words: partnership, public administration, non-governmental organizations, public-private partnership, partnership management.

JEL Classification codes: L33, L38

I. Public Administration and Partnership Practice

Bringing supplementary resources represents the aim of the openness of the public institutions to public-private partnership, as an instrument in community problems solving process. This openness is a must considering the genuine explosion of citizens' public needs corroborated with the chronic lack of resources any public institution has to face, regardless which part of the world it functions.

The Partnership Concept

Assuming partnership as a governing principle represents, from a political point of view, a democratic option and, thus, has the significance of a political message; meantime, it implies an great effort to ensure its institutional and procedural premises and, by consequence, has the significance of a institutional development program, situation which brings advantages and risks simultaneously. Among its advantages for the public authorities are increased public support for

their ongoing programs, attracting supplementary resources compared with the ones commonly available to public authorities and an increased adaptation of the public services to the community needs (Bancila et al. 2002:42). Partnership is not a purpose in itself, but, from a methodological point of view, it is a way to approach problems, while from a managerial point of view it is an instrument used in solving problems. Partnership is the way, formal or informal, through which two or more parties act together in order to achieve a joint goal or joint objectives, based on a joint plan of action and joint dedicated resources and under a joint resources and activities management. The specific approach through which resources are jointly dedicated under a joint management makes the difference between partnership and cooperation concept while the differences between the two words are difficult to notice from a semantic point of view. In the same respect, joint management makes the difference between a partnership and a funding relation.

As far as it concern the decision process, in partnership relation, the parties must not necessarily have equal shares, but is important that they are treated as sitting on equal grounds because partnership can not be build on a subordination relation. Consequently, in a partnership, the decision power can be split between parties evenly or proportionally with their contribution (Bancila et al. 2002:40).

The partnership types can be considered based on diverse criteria, acting simultaneously or independently, which generate a relatively complex typology (Bancila et al. 2002:39). Thus, from a legal point of view, partnerships can be formal or informal. When the goal is specific enough and achiving it is not a problem, an informal partnership can be established if the parties are similar entities, knowing each other and, eventually, having a cooperation history together. In the case of a more complexe or long term or if parties are different type of entities (NGOs and public authorities, or NGOs of different nationalities), partnership tends to be formalised. Another criteria for partnerships classification is the type of the partnership goal. Thus, one can find *representation partnerships* like federations, unions, councils, aliances, coalitions, etc. together with *operational partnerships* which implies the existance of specific projects as a reason of the venture. Partnerships can be established on a long or short term, with its own funding or attracted funding, etc.

Meantime, it should be mentioned that public-private partnership, as a specific cas of partnership [1], may define an public authorities' initiative to solve community problems by involving a private partners, either from business sector, or nonprofit sector. This paper is focusing on the second category of potential private partners.

NGOs as Public Policy Subjects in Romania

Coagulation and development of the nonprofit sector, as an alternative to the activity of the market and public institutions, creates the opportunity of an analysis of the public authorities-NGOs partnership management and, implicitly, the clarification of the nongovernmental organization concept. Comparing to the other categories of institutions which operate in the community, nonprofit nongovernmental organizations (commonly known as nongovernmental organizations - NGOs) ressamble to private commercial entities concerning the way they function, but their goals and objectives are focused on social needs approached through public interest activities, without a distribution of the profit (if does exist) among the persons involved in the activities. This brings NGOs closer to the logic of the public institutions (Andersen et al. 2010:8). There are many definitions on the nonprofit nongovernmental organization concept. According to the structural-functional definition (Salomon 1992:6), NGOs should meet couple of criteria: to have an institutional structure, to be of private nature, to do not share profit, to be self governed, to be volunteer run.

Further, the discussion is focusing on only some of the NGOs, more precisely, in the meaning of this text, nongovernmental organizations or nonprofit organizations are defined as an organizational category, formed by institutionalised entities, of private nature, dedicated to social needs, independent from public institutions and not interested in political power (i.e. political parties) or profit (i.e. commercial private organizations).

In some countries, the relations between NGOs and public authorities have a long and well grounded history. For other countries, Romania included, relations without an evident political character between NGOs and public authorities represent a new type of public relations emerged in the beginning of the '90ties. They were possible only when democratic changes in former socialist countries started while previously their governments kept all private initiatives under strict surveillance and administrative control (ICNL 2000). All the governmental strategies issued in Romania after 1990 included public authorities-NGOs partnerships as a constant objective for all governments. Periodically legislative and institutional initiatives aimed to facilitate public authorities-NGOs sectoral, national and local consultations were announced (Lisetchi and Olteanu 1998:3). While the governmental interest for NGOs has a history of over 20 years, a review of the public policy on NGOs main hallmarks shows that actual period is a transitional one and Romania is still in a phase of institutional set up (Lisetchi 2006:1).

NGOs' Evaluation by Public Authorities

In order to evaluate the NGOs' potential to be associated in the public policies elaboration, implementation and evaluation process, and, also, to apply the Romanian legal norms (O.G. 26/2000), it is useful for the public authorities to elaborate an appropriate methodology. Public perception on NGOs is an important factor in assessing this potential (Bancila et al. 2002:45). NGOs shows an higher level of public trust comparing to authorities (FDSC 2010). Citizens' appreciation for NGOs is as increased as they: facilitate the citizens' participation, strengthen cohesion and solidarity, get involved in partnerships with the authorities and have strong local roots. NGOs seem to be less trustful if perceived as part of the public system, beneficiary and consumers of public resources, or if they are perceived as weak or centred on their own goals, if these are different from those of the community (Bancila et al. 2002:45).

Assessment Criteria of Public Policies on NGO

In order to foster the possibility of evaluating the willingness of the public authorities to get involved with the non-governmental organizations it is necessary to employ some criteria to ensure a standardised assessment of the associative behaviour of the public administration towards potential community partners. Such criteria (Bancila et al. 2002:45-46) are as follows:

- a) existing institutionalised structures that link the public authorities to the associative sector;
- b) existing solution grids, accurately and univocally defined, such as recurrent institutionalized processes;
- c) applying the principle of equal opportunities to any non-governmental organisations that request assistance;
- d) applying the principle of supply and demand in any public administration- NGO relation;
- e) employing accurate selection criteria of the services offered by the organizations;
- f) the access of organisations to public services contracting within equal terms as other economic agents;
- g) the registration of relevant information regarding the organisations that perform their activity within the covered geographical area;
- h) jointly designing a job description of the public clerk whose attributions should entail the relationship with the non-governmental organisations;

- i) showing interest in raising the awareness and the sense of responsibility of the elected officials in relation to the electorate;

II. The Partnership between Public Administration and Non-Governmental Organisations ***The Opportunity of a Partnership between Public Administration and NGOs***

The advantages of an on-going collaboration between non-governmental organisations, as relevant agents in the social economy, and the public authorities aiming at solving the community problems, are as follows: the access to complementary resources, and implicitly, an increase in the range of actions of the partners beyond mathematical calculus, an increase in the credibility and public image of the partners, as well as the social benefit corollary to positive models established within the community, etc.

In the process of identifying and solving the community problems the actions of the non-governmental organisations are considered as “alternatives” to the solutions of the public administration. In order to render perspicuous the choice of the word “alternative”, it is necessary to explain that communities do not have to choose between the development model brought forth by the public authorities and a model suggested by the organisations, for the very reason that organisations cannot launch such an offer. Only in exceptional circumstances can NGOs entirely solve a community problem. At the same time, the way in which NGOs take action can represent a model of approaching a problematic matter, not the only way or the best way, however, most definitely efficient from the perspective of a cost/benefit analysis. This does not mean that non-governmental organisations are to replace the public administration or that they are to perform the duties of the latter. The offer of the non-governmental organisations does not represent an alternative *per se* to the services offered by the public institutions. NGOs represent an action method complementary to the activities of the administration, through which the community becomes responsible towards solving their own issues (Lisetchi 2006:1). In this context, *the partnership can be considered a desirable principle of action* which can be found, to a certain extent, in the organizational culture and the practice of some public institutions.

Management Approach of the Public Administration - NGOs Partnership

In an attempt to optimize the public administration-NGOs partnership, some specific aspects are to be considered:

- a) *different resources*: the authorities have the possibility to allocate public funds, as well as the capacity to issue regulations, while the NGOs have the possibility of accessing private funds, respectively, the expertise to solve specific issues and the capacity to motivate/mobilise volunteers.
- b) *working method*: the operation capacity of the authorities is limited by the attributions foreseen by their regulations, respectively, a slow reaction held back by bureaucracy and the propensity towards solving the general issues, while the NGOs are more flexible, faster in their reactions and the tendency to focus on specific problems.
- c) *the organisational structure and culture*: the authorities are larger organisations comprising complex structures, while NGOs are smaller organisations with simpler structures (Altman-Sauer et al. 2001:34).

The differences can generate tension; the main obstacles that hinder an efficient relationship between the NGOs and the public authorities have been identified: (I) different perspectives of the two sides concerning the same matter, (II) the lack of understanding the peculiarity of the activity carried into effect by the other, (III) the particular economic and cultural effects of the community on the communication methods, on the spreading of the information and of the decision-making and (IV) the power relations between the two parts involved (Altman-Sauer et al. 2001: 35-38). The common element that was identified by the two sides, i.e. the fact that it

addresses the same group (members of the community sharing the same problems) and the capacity to find solutions for the above-mentioned obstacles, can lead to an advantageous cooperation between public administration and NGOs, that will, consequently, benefit the community.

Cooperation within a public-private partnership is facilitated in the following circumstances: collaboration should focus on a single matter, the purposes are clearly stated, public participation in the process of solving the community problems, each partner should devote time and resources to plan the cooperation, the intentions and coordinates of the partnership should be clearly established by the two parts, the necessary resources for a good cooperation within the partnership should be accurately identified, assessed and allocated, communication should be appropriate and efficient, the attributions, skills and responsibilities of each partner should be specified, a decision-making system based on the equal status of the partners should be designed (Altman-Sauer et al. 2001:34-35).

Exercising the Public Administration- NGOs Partnership in Romania

If at the beginning of the last decade non-governmental organisations were perceived as being rather anti-governmental by the public authorities, partnerships between them being exceptional, currently things have changed considerably with the opportunities offered by the European financing programmes prior to Romania's accession to the E.U. The fact that the European Union, according to the financing programme, either imposed on the public administration the partnership with the non-governmental organisations, respectively, imposing on the public institutions the partnership with NGOs, or it granted a higher score for such collaborations, has led to a spectacular proliferation of the number of public-private partnerships in Romania. It is worth mentioning that, as a consequence, more funders took up this approach as part of their financing policies. Given this context, towards the end of the last decade, partnerships became a purpose themselves, being assessed inconsistently in terms of the management or the results of such a process.

On the other hand, financing the projects of the non-governmental organisations by the public authorities, as a recommended practice by the community development theory, has led to an extensive employment of the term partnership in the marketing discourse. Nevertheless, such an interpretation of the financing relationship between the two types of institutions, even if valued on first sight, is abusive if compared to the concept of partnership which entails a process of co-decision in operating the tasks to be handled by the parts involved in the partnership. Regarding the above-mentioned issues, the problem raised is that the public-private partnership is deprived of its deep structure and meaning.

To bring forth a general perspective regarding the practice of the public-private partnership, it is worth mentioning that, as in the case of Romania, the current legal framework allows the development of the relations between public authorities and the non-governmental organisations (OG 26/2000). The question raised is why this type of a more consistent approach is not used in the current practices of solving the community issues in Romania. The following causes should be considered in response to this question (Lisetchi 2006:20): the lack of an associative culture at the level of all potential partners, the access to resources is by far too limited on behalf of any of the two parts involved, a neutral, thus, unrestrictive legislative environment, but at the same time, unstimulating towards an associative action, i.e. limited management capacities on both sides. Concerning the issue of the associative culture, the GLOBE Romania research (Bibu et al. 2008) shows that in relation to the obtained score for the cultural dimension criterion, *Institutional Collectivism* (Collectivism I), Romania is situated on a scale from 1 to 7 at a relatively low level, 3.75, in comparison with the rest of the world. This number outlines the degree to which institutional practices at the social and organisational level encourage and

compensate for the collective distribution of the resources and the collective action. A low number indicates less collectivism, thus, more individualism in relation to the general interest in society. Nonetheless, the score of 5.43 for the cultural dimension *Group Collectivism* (Collectivism II) is situated at a higher level on the world scale, which indicates that in Romania individual expressions of pride, loyalty and cohesion within smaller groups, such as the organisation, the family, are more recurrent. Romanian culture favours smaller groups and their interests and puts at a disadvantage the general interest in the society. Consequently, the associative factor is not favoured by the Romanian culture. The narrow interest of the group they belong to is the strongest. Therefore, it is necessary to clearly point out the common areas of the two partners in order to render the partnerships viable.

In practice there are naturally more differences in approaching the way in which the authorities and NGOs relate to community problems. Public administration tends to unfold partnerships in especially in certain fields: unemployment, social care, local development, citizen-public administration relation, health, SMEs, environmental care, education, the non-profit associative sector, the protection of the disabled, tourism development, child care, regional development, culture (Bancila et al. 2002:42).

In establishing the partnership vocation of the NGOs, the representatives of the administration tend to employ, in this very same order, the following indicators: the objectives of the organisation, the target-group, the resources of the organisation, the impact, the level the public participation. There is a considerable difference between this evaluation grid and the one carried into effect by the financing foundations (for example, the small amount of importance given to the impact), which can be explained through the different experience in terms of evaluation of an organisation and its programmes.

In Romania, according to the public administration representatives, the following major obstacles stand in the way of the administration-NGO partnership: deficiencies in the functioning of the authorities 29%, inadequate institutional and legislative environment 22%, authority resources 15%, disfunctions in the running of the NGO 15%, lack of information 10% (Bancila et al. 2002:44). In effect, it was noticed that in the past few years in Romania, falling beyond an existing theory concept and favourable narrative discourse, there still exists an unequal involvement of the two potential partners in the development of the collaboration. Naturally, there are also many cases of partnerships between non-governmental organisations and public institutions, this fact being registered positively. The truth of the matter is that, on the background of the opening declarations of the public authorities on the common actions, there is a passive attitude towards this type of approach on behalf of most of the institutions (Lisetchi 2006:21-22). The initiative regarding the common resolution of the problems of public interest continues to be to a great extent in the hands of non-governmental organisations. Needless to say, not all organisations can be included in our analysis, as well as not all public institutions are part of this discussion. Nuances of the discourse should be observed in the context of a reality in which not all non-governmental organisations should take a role in the public welfare, insomuch as the assertion above does not mean that all public institutions should collaborate with non-governmental organisations in order to deal with community problems. NGOs are, in general, the ones who request the collaboration of the public authorities according to various conditions: individual priorities, willingness to work in a partnership, the public relations image of the organisation, etc. The public administration accepts or refuses to be involved in such actions. At a surface level, the normality of the situation described above cannot be refuted. The problem, though, that should be raised revolves around the attitude towards the responsibility of solving the community issues of the two potential partners. If, for the public administration, this type of responsibility is legally regulated, having a binding character, imposed, and, eventually, it represents the reason to be of a public institution, for the non-governmental organisations, as

structures of private initiative, taking this kind of responsibility is the result of the individual willingness, motivated by the interest in the public welfare of a private group. (Lisetchi 2006:22).

Recommendations Regarding the Public Administration-NGO Partnership

The problem of the partnership between the public administration and the non-governmental organisations represented an interest point for the Romanian nongovernmental sector even from the period of the first mandate of The Group for the Implementation of the Resolution of the NGO National Forum (GIR) formed in 1998. Thus, some general recommendations that make direct reference to the current discussion can be enlisted among the mentioned activities within the context of a GIR proposition regarding the future actions of the associative sector:

- a) The reinforcement of the local and central public administration capacities to work with the civil society, manifested through public authorities agreement procedures of the non-governmental organisations as service providers and organisers of citizen consulting centres
- b) Involving the citizen in the public decision-making on the basis of pre-arranged procedures

Altman-Sauer, Henderson and Whitaker (2001:37-38) have a couple of recommendations for the two parts involved in the promotion of the NGO-public administration partnership:

What can the non-governmental organisations do?

1. Inform the relevant authorities throughout the year about their progress, not only in the case of the partnership launching or fund raising.
2. Attach importance to the functioning of the entire community, not only to the organisation target group.
3. They should be responsible and fair and bring proof of that to the public eye.
4. To reinforce the trust of the public in the organisation by presenting a trustworthy and professional image.
5. To help the community learn how to manage the problems that the organisation tries to solve and into which they have not gained an insight yet.

What can the public authorities do?

1. Diminish the frustrations, tensions and mistrust in the NGO.
2. Ensure an overt management of the financial requests which come on behalf of the NGOs.
3. Tackle the problems and needs of the community as being part of it, not only the ones of the NGOs.
4. Recognise the potential of the NGO as a serious investment.

What can the non-governmental organisations and the public authorities do together?

1. Exchange information during their common work relations, as well as in general.
2. To commonly use certain resources.
3. To develop clear guidelines about each part's expectations and work on this to reach a common balance ground.
4. To acknowledge the other part as the best support for dealing with the public sector priorities.

Apart from the usefulness of these recommendations, it is foreseeable that carrying them into effect in the partnership between the public administration and the non-governmental organizations is done progressively, during a slow process conditioned by the common culture in Romania, both at an institutional and at an individual level. Nevertheless, their value is highlighted by the possibility of their use as a referential point towards which the organisational behaviour of the two types of institutions should be oriented, as well as criteria for a post-factum evaluation of the management and the results of the partnerships.

Note:

1. It is worth mentioning that the partnership typology also comprises public-public or private-private partnerships, apart from the public-private one.

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ELEMENTS FOR A MODEL OF ENTREPRENEURIAL SCHOOL FOR WOMEN IN RURAL AREAS OF ROMANIA

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Romanian mentality, especially in rural areas is deeply influenced by culture, literature and history of the Romanian people. This proves to be both adaptable and rooted in the old Romanian traditions and customs. In the last two decades, the transition from socialism to capitalism, modern society, the socio-economic development of the country has left strong impressions on the way of thought, expression and action of the Romanian people. Women in rural areas are no exception. As some groups of people interested in their development of social-economic scale, rural women are trying to adapt, to evolve, to overcome the barriers imposed at psychologically, socially and financially.

The paper highlights the results of a survey on a sample of 979 women students in the project "Entrepreneurship and Equal Opportunities. An inter-regional model for women entrepreneurial school "(AntrES acronym), which certified mediators intention to initiate their own business. The results of questionnaires have provided important information about the character, ambition, motivation, courage, and moral support and financial support to women entrepreneurs based in Romania, including those in rural areas. The information obtained inetrmediul "I shattered" 7 myths about starting a business in our country. Romanian entrepreneur spirit, women in rural areas in Romania is not only a manifestation of strong desire to improve living standards in financial terms, but rather an "effort" to improve and "beauty" of the individual, family, environment and society we belong!

In developed countries, at its home, female entrepreneurship is trying to reform, to seek new solutions to rethink the principles, to exercise imagination, to learn. Here, in Romania standard behavior still predominates. Female entrepreneurs are doing what everyone else in the same category does. The future however belongs to those who will opt diversity, surprise, excitement, personalization. How could this happen in the Romanian rural environment and take place in a sustainable way?

Keywords: antreprenoriat feminin, mentalitate românească, mediul rural, mituri, potențial

Jel code: M12, M52

1. Continuity and change in rural Romania

"The main feature of Romanian people is its gregarism, a condition imposed by the circumstances and traditions, no entrepreneurs come out from within the rural population, however exists a tradition of collective work, each aligning with what others do. From the perspective of the future, gregarism continued as such, can be fatal. Modern society requires individuality, consciousness of effort and personal sacrifice". (Radulescu-Motru in Malița C. M., 2010). Modernity entered the Romanian society over 200 years, but has not profoundly changed economic and social life, especially in rural areas, the Romanian village. The continuous transition of Romanian society and especially the latter, the last 20 years, gave birth to a mosaic, a modern "type patch" without a clear dominant form. It is a modern trend, ie a type of modernity that affects only a certain part of society and is beneficial only to certain groups concerned with their economic and social condition. (Schifirneț, C., 2007, 2008). Romanian mentality is the result of survival in a given area, seen as a drama in time - paraphrase by Patrick Geddes, who

proposes the term "survey before action", ie the need for building action on a synergy between ecology, economics, politics and anthropology. Data collection should blend with the description, explanation, observation integrated into a systemic research, in which the mentality seems to occupy a central place as part of a unique spiritual model, specifically built over time, which determine the motivation for use of resources on a territory (area, central area, region). Romanian mentality, especially in rural areas shows a great capacity for adaptation and also versatility, a balance between idealism and fear, between the initiation of large projects and autoassertion of certain limits. In fact, Romanians have all the features, static distributed in the population, but what is evident is that they change according to circumstances, meaning they are adaptable (Malița, M., 2010; Draghicescu, D., 1995). *Adaptability*, as a intermediate soul structure between Western creative ability and Oriental passive resignation may mean evolution, intelligence, finesse, suppleness, as progress may mean cowardice, duplicity, cunning, superficial. (Ralea, in Malița M. M., 2010). There seems to be more obvious what Mihail Ralea says in his book in 1933, *Romanian Phenomenon*, that "progress towards modernity will never come from autochthon localism, but of Europeanization". "Romanianism, ie, what is particularly unique and Romanian, is not done, yet not coagulated, but with a bergsonian formula, is yet to be done. He's still that prospect that is questing, endeavouring itself "said Michael Ralea. This emerging trend is visible in many Romanian villages in western Romania, with new and modern homes, through various goods and crafts exposed along the road and especially by many rural firms who have found qualified and cheaper labour force, lower rents, lower taxes. In addition it seems to be some kind of reconciliation of the "house" with "work", after over 20 years, during which millions of Romanian worked in Europe where they have adapted, were integrated and learned. Sometimes by bitter lessons, sometimes paying a price too high. Some have returned and are looking to do something, here at home, home being a state of mind rather than a specific location. Rural community, like all other social forms, is the result of six components: biological, moral, religious, aesthetic, economic and political (Braileanu, T., 2000). Migration of Romanians abroad was primarily due to financial reasons, poverty. What we need to say at this point, however, is that it talks about three types of poverty: "Poverty of goods and money (type I), moral poverty (mediocrity of social feelings, of the sense of family, of the love of nation, love for God and neighbor), which is a poor type II and poverty type III, the one in knowledge"(Daniel Bell Badescu, I., 2005). "The dominant mentality is that of trade and finances, which have created, trained and handled a consumption society, in which the citizen identity has been replaced with the credit card. There is no falsification of the human essence more bitter than the representation of man as a seeker of silver pots. He looks, indeed, other treasures, which ensure a dignified life and by merit earned through effort and wise strategy ... The crisis revealed the weakness, which requires time for healing and normalization". (Malița, M., 2010).

2.The research of entrepreneurial intentions of women in rural areas within the project AntrEs

Between January 2009 and December 2010, was implemented by the University of Oradea Faculty of Economic Sciences as coordinator, the project "Entrepreneurship and Equal Opportunities. An inter-regional entrepreneurial school model for women "(acronym AntrES) strategic project financed by the European Social Fund, the key area of intervention "Promoting an entrepreneurial culture". The main objective of the project was to promote equal opportunities for entrepreneurship by encouraging the involvement of women, in general, rural women, especially in the initiation and development of their business in the context of sustainable development of communities in the counties located along the western border of Romania (Bihar, Timis, Arad, Maramures, Caras-Severin, Satu-Mare). Among the specific objectives were enrolled: providing training to acquire expertise in business startup; active promotion of lifelong

learning, promoting competitive spirit by awarding the best business plans, dissemination of best practices in entrepreneurship in order to develop sustainable communities in the counties located along the western border of Romania.

The study conducted between July 2010 and March 2011 followed the intentions of a number of 874 women - women business school graduates from rural areas of West Romania to start their own business.

Data were collected through a survey at the beginning and end of the Module I course - Starting a business, conducted between July-September 2010 by non-directed interviews and by the study of documents prepared within the project mentioned above.

The initial sample consisting of 979 women presented a series of characteristics retrieved synthetically as follows: average age is 35.47 years, 74.6% are married, two-thirds live in households with one or two children, 66% are employed and 84% did not initiate any deal so far. 43% of the total have undergraduate and graduate studies, almost 60% work for the state (public administration or education) and intends to open a business in trade - 32, 4% as expected in agriculture.

According to the latest data, the number of newly established businesses by the entrepreneurial business school graduates at the rural level is 88 (10% of graduates), as follows: Bihor – 18, Timis - 8, Arad - 12, Maramureş - 29, Caras-Severin - 9, Satu Mare - 12.

What factors have led these graduates to take action to overcome their fears and leave their habits? And especially what are the key elements on which an entrepreneurial school for rural Romanian women must be based to succeed?

In an attempt to provide a consistent answer to these questions, we will start from the results of the questionnaire analysis, questionnaire applied in the 72 rural centers of business school for women, to a total of 979 respondents:

- Question 1: What do you think are the chances to open a successful business? 12% of the respondents believe that the chances to open a successful business are high and 53% believe the chances are average;

- Question 2: What are the qualities you think a woman needs to open a business? Choice number 1 was: confidence, courage, optimism - for 184 respondents (18.79%); intelligence, intellectual resources - 130 respondents (13.27%); will and ambition - 128 respondents (13.07%);

- Question 3: Which is the reason you are willing to start a business? Responses were: the need to earn more - 46%, the desire for fulfillment - 33%, desire to have a higher social and professional status - 12%;

- Question 4: What support elements do you think are needed to start a business? 66.49% - financial and material resources, emotional support (family, friends, close) - 10.72%;

- Question 5: What do you think are the areas in which to start a successful business? Trade - 335 respondents (34.21%), tourism - 210 respondents (21.45%), other services - 118 respondents (12.05%);

- Question 6: How should labour be seen to succeed in business? A pleasure - 79%, a necessity - 9%, a duty - 8% non answers - 4%;

- Question 7: What is the factor which depends primarily on success in business? Courage / audacity - 30%; intelligence - lucidity - 23%; exercise capacity - 15%; socio-economic context - 13%; chance - 11%; imagination - 4%; non answers - 4%

The review of the results is shown below.

Seven myths dispelled

The first myth: Second hand entrepreneurs do not take risks!

Reality: The entrepreneur may seem to the uninformed spectator strait-laced and conservative, but that does not mean that he is not prepared to engage boldly assuming significant risks. Like

when you prepare to climb a high mountain, you can be fearful, but such a challenge puts the blood in motion and can generate a momentum and a huge effort. And something more: "the Romanian is more difficult to move and easier to stop. It does not seek immediate spectacular results, but other more subtle and profound ". (Malița, M., 2010). The society within us, a product of the spirit of our times, puts his stamp on the limited, strait-laced of our thinking. "We all live in a very narrow cage, the spirit of our age in which we have very little freedom of movement. If in different ages, people have thought in different ways, not because it was due to expanded cage, but for the fact he was moved from place". (Szent-Gyögyi, A., 1981).

Second myth: With the ability of an entrepreneur you have to be born!

Reality: Man is build, as a road as long as it is it starts with the first kilometer. In our opinion, even if someone does not seem to be an entrepreneur, he/she can become! There are no few recent examples populating the area of knowledge that we have access. "Life itself is what you want it to be" (Marcus Aurelius). To do this you first have to believe (strongly). "Transformation, real change always occurs from the inside out ... arising from work which toils at the roots, operating on our way of thinking, on the paradigms that define our character and create the lens through which we view the world (Stephen R. Covey)". Romania is trying to change the binding data and seeks to define objectives and methods that allow more suitable ways to promote the interests, of which the first is survival." (Malița, M., 2010).

The third myth: In business you enter to make money!

Reality: A professor of production management for a long time explains to his students the importance of "a job well done", until he was interrupted by a (bored) student who said (determined) "I do not want to make products, I want to make money ". The professor (calmly) asked: "And the money for what?". Contrary to popular saying, money brings happiness. *A kind of happiness.* One direct, material that is not rejected at all, or even a more subtle dependent on the holder person, most envied (the joy of giving). Poverty is far from being "a card" and has little to do with "honesty" (almost at all). Therefore we advocate for "wealthy and honest" and not for "poor and honest ". At the same time, with more conviction, we believe that continuing to work hard in a business where money is no longer a problem is something to be appreciated (very much). What is worth saying at this point is that the path to "having" (sparingly!) has many other items, ie determination. Obsession to make money seems to be a fairly sure way not to get them!

Fourth myth: In business you have no friends!

Reality: Is it all true that "the spirit of democratic capitalism, which led to development was to encourage individual, based on deep understanding that this is the main source of economic and social power (Novak, M. Ionescu Gh in Gh, 1997). But this is individualism? That crazy idea that "the world begins and ends with you", that you are enough? Not so, the existential model is quite different. Beyond having with what to live, you have to have something to live for. It is natural to pay special attention to our business, our goals, our ideas. But the result of an exclusive concentration on interests and selfish attitude of seeing the world as a whole and the people around us as tools used in our plans lead to counterproductive and disgraceful results. Key terms of today's economy, durability, in my view, female entrepreneurship in rural areas of western Romania, refers primarily to the people!

Fifth myth: A successful business requires a great idea!

Reality: Setting up a business from such a conception may be a bad idea. Few businesses have been based on such an idea. In fact, some have been established simply based on an idea more simple, banal even while another group were raised from the ashes of failure. "the Romanian can not accept almost any event or program in a form which is given, or is required. The Romanian is realistic. He rates fiction, myths and legends he likes, but keeps his feet on the ground ". (Malița, M., 2010). We join the mathematician Grigore Moisil's opinion, that the logic is rather a

nuanced reasoning in which thinking is evolving in a direction that includes, besides true and false or dubious value as possible, with possible and necessary.

The sixth myth: In business the most important thing is "to deal"!

Reality: Our view is that the vital question for an entrepreneur is not : "How well am I doing?" Or "How can I cope?" Or even "How well we handle ourselves to cope competition?" but "How can we make things better tomorrow than we did today? ". The history of a business is written by its people and their work is the special "ingredient" in the "magic formula" that "is to grow". "The Romanian undertakes all the action, if it has a real motivation." (Malița, M., 2010). Motivation is an emotional drive type, but with rational arguments. More strings must vibrate: ambition, rewards, influence, social position, reputation. But beyond these events rather selfish comes a heavy argument: "you are what you know to do".

The Seventh Myth: You have to be lucky to succeed in business!

Reality: Reflecting on the essence of success, J. Willard Marriott, wrote in his diary: "Discipline is the most important thing in the world. Where there is no discipline, there is no character. And with no character, there is no progress ... problems gives us the chance to grow. And usually, we get the thing for which we worked. If it encounters obstacles and overcome them, we anneal our character and qualities that bring success". "Long term success of a business organization, is determined by three main factors: 1. good planning of various activities / actions, 2. a better implementation of various plans / strategies, 3. luck or that non-chance in a given context. " (But the chance never comes to an unprepared mind – o. n.) (Harrington & Harrington, 2001).

3.Preserving the essence and stimulate progress

In our view, in rural areas, women have a real chance in the direction of setting up a business because "the village is the shrine where she took refuge and is kept living the manifestation of the Romanian people" (Dimitrie Gusti) including the preservation of moral values and skills necessary to create a complete product, in other words knowledge.

As Professor Allen Wilson, a biologist at UC Berkeley who has studied closely the behavior of birds, knowledge creation and dissemination of appropriate behaviour had to do with three basic elements: 1. mobility (the ability to move freely to learn and experience) 2. spread within the community (the ability to transfer from individual to community building communities of best practice), 3. innovation (the ability to develop new skills to take advantage of new knowledge in specific environmental conditions) (Hjelmervike Ove R., 2001). We have identified the existence of these elements in the rural areas of western Romania, including examples of adaptation between the most interesting. Adaptation, defining feature is based on the characteristic skills: *knowledge, information, experience, which can be put into use to create wealth and remain the same in any social environment.* Efficient use of knowledge, skills, abilities and cultural values of rural women towards encouraging female entrepreneurship depends on public awareness that women, who prove to be more vulnerable, more exposed to "insolvency" are much more concerned than men on what she spends, what she earns for food, education and child and family health insurance (Brockhaus, R. & Horwitz, P., 1986 Miniti, M. & Naud, W. 2010). Despite many obstacles in the way of Romanian rural female entrepreneurship, we believe that it "is about to get done, although is still that prospect that is questing, endeavouring itself" (Michael Ralea).

On the basis of this statement there are three important aspects:

- *the existence of a potential* consisting of knowledge, information and experience which can help achieve competitive products and services;
- *the ability of this potential* to transform in a number of operational elements, creating value, to be integrated into final products;

- *grafting this potential of adaptation* as a characteristic feature, which is a transformation, an adjustment, a location, a selection that you cannot do without having inside the affinity with what you choose.

In our view, rural female entrepreneurship in Romania is not only something that is expressed in terms of improved incomes, the desire to avoid dependence on others or even better control of their lives but most of all, "a deed" that improves the person concerned and the world around them. It takes however a first generation of entrepreneurial skills to rehabilitate honest skill, science - and pride - to do what you do with virtue. Future will not mimic models but invent them!

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ORGANIZATIONAL STRESS AND ITS IMPACT ON WORK PERFORMANCE

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Nowadays, in times of economic crisis, most managers or entrepreneurs have to cope with a lot of new job challenges which can easily transform into stressors. Work related stress is of growing concern because it has significant economic implications for the organization. Even if some stress is a normal part of life, excessive stress can influence one's productivity, health and emotions and it has to be taken under control. When people lose confidence, they refuse to take responsibilities, they get quickly irritated, they are unsatisfied of their job, their performance will be very low and the organization will be in danger. Fortunately, most managers and entrepreneurs know which stress main symptoms are and have the necessary knowledge for managing and reducing it before it can affect employees' daily work.

Stress can have an impact both on the organizational welfare and on personal behavior of supervisors or employees, that's why, the ability of managing it can make the difference between job's success or failure.

The purpose of this paper is to study Romanian managers and entrepreneurs from Bihor County's perception regarding the stress phenomenon, if they feel that they are affected by stress, if they promote some methods to reduce it and if they consider that stress can influence the organizational performance.

As a research method we used an online questionnaire, applied to a number of 75 managers and entrepreneurs that represent the target group of the project "Flexibility and performance through management", project financed by the European Social Fund - "Invest in people". Each participant had to answer a number of 35 questions regarding stress and the results will be presented in this paper. The main conclusion is that, even if job itself is seen as a stressor, there are other important factors that can produce stress such as: family problems, personal problems or social problems.

Keywords: organizational stress, impact, managers, entrepreneurs, work performance

Cod JEL lucrare: M54

1. Organizational stress

Organizational stress can be defined as an emotional, cognitive, behavioral and physiological response to the aggressive and harmful aspects of work, work environment and organizational climate. It is a condition characterized by feelings of helplessness in solving tasks.

In other words, work-related stress is people's reaction when they have to face some demands or special tasks that are out of their abilities or knowledge.

Types of organizational stress

The main types of organizational stress can be considered the following (1):

Eustress represents a positive kind of stress and helps people to prepare their mind and body for whatever is about to occur in the future. Eustress can develop one's energy, creativity or competitive spirit and can offer the strength for achieving performance.

Distress occurs when something affects one's routine for a short period of time. It has a negative impact on people and it contains the following categories of stress: acute stress and chronic stress.

Acute stress appears when a change transforms one of the usual works that a person do. Although it seems to be an intense type of stress, it passes very quickly. The symptoms to that kind of stress are: headaches, hypertensions, rapid heartbeat and stomach problems.

Chronic stress is the most serious type of stress and can be very harmful for people's health. It occurs when something changes the routine for a long period of time, from weeks to years. This kind of stress appears when facing several work or personal failures.

2. The effects of stress on the entrepreneurs/managers and stress management

Sources, symptoms and effects of stress for entrepreneurs/managers

After analyzing the causes of organizational stress we can distinguish between those who act solely on entrepreneurs or managers. These causes can be the following:

- the diversity and complexity of tasks;
- high responsibilities that require management positions;
- concern for the organization's future;
- aware of the potential effects of a poorly developed decision;
- inappropriate management style;
- excessive centralization of authority;
- the existence of poorly professional trained subordinates;
- the extension of work program due to the emergence of some special situations.

The relationship between stress sources, symptoms and diseases caused by stress for managers/entrepreneurs, can be graphically represented like this (Fig. no. 1):

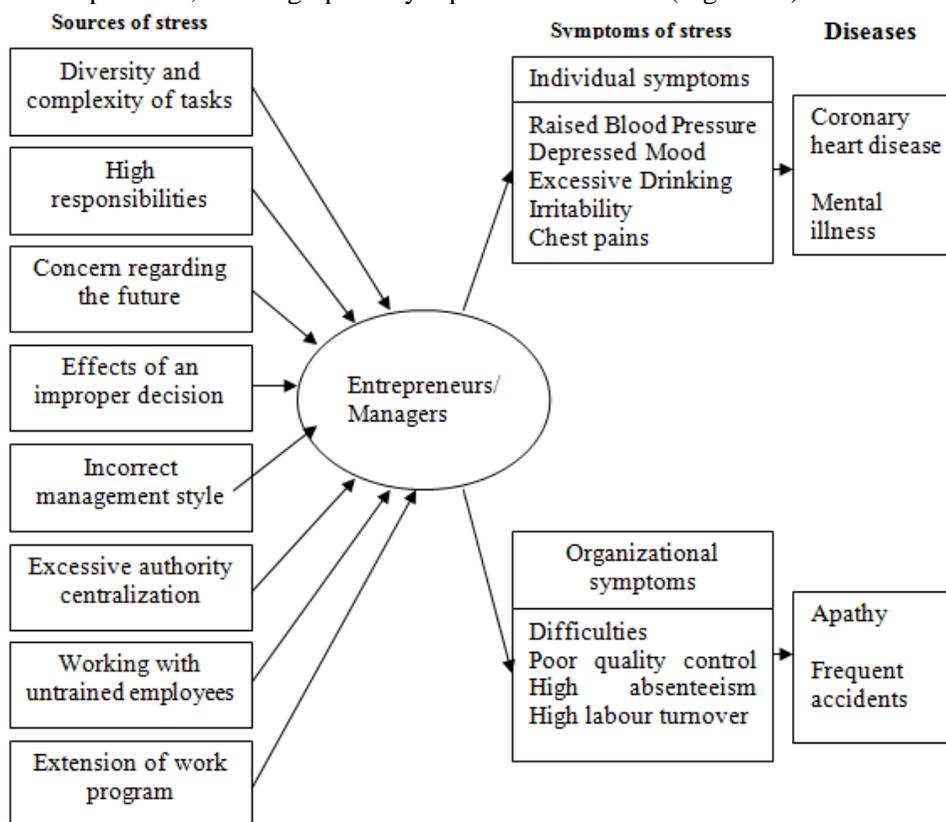


Figure no.1 The relationship between stress sources, symptoms and diseases caused by stress for managers/entrepreneurs (2)

Adaptation by: Agrawal, Rita, *Stress in life and at work*, Response books, London, 2001, p. 146

Ways of managing individual stress

There are a lot of actions that individuals can take in order to manage their stress level and to prevent them from developing into more serious problems. The main positive actions that people can take fall into three categories:

- modification of behavior;
- development of a healthy lifestyle;
- alteration of mindset.

When talking about *behavior*, the interventions that can be made are:

- being more assertive: listen to others, respect others, tell others what you feel or need, negotiate, compromise, being self-confidence.
- improving time management: establish priorities, make a list of what must be done, eliminate time-wasting activities, focus on essentials, be able to delegate effectively, learn to say “no”, organize daily activities, make a list of targets.
- avoid perfectionism
- avoid getting angry over things that you cannot influence;
- accept (sometimes) the errors of yourself and others;
- smile and give affection;
- practice being a good listener;
- learn to relax;
- learn to turn stressful life events into challenges for personal growth;
- get used to take some “time out”.

As far as *healthy lifestyle* is concerned, the main activities that people can follow are:

- a healthy diet: alcohol taken with moderation, limited quantity of caffeine, avoid carbohydrates, eat fruits, vegetables and sufficient quantity of water;
- regular exercise: reduce muscle tension, increase energy, maintains self-image, appearance and tends to control weight, helps to clear the mind of worrying thoughts;
- relaxation: improve sleep patterns, ameliorate pain, reduces stress response, increase self-esteem;
- increase leisure time and taking up hobbies.

The third area in which people can make interventions refers to the *alteration of mindset*, including:

- modification of perspectives;
- self-talk;
- positive thinking;

Ways of managing organizational stress

There are a lot of strategies that can be applied when talking about managing organizational stress, such as:

- early prevention and elimination of work-related problems that can produce stress;
- change work demands;
- ensure that employees have the necessary knowledge and abilities to perform effectively their jobs;
- improve constantly the technique used at work;
- apply a proper management style;
- ensure a proper work environment;
- offer employees a stress management training in order to teach them ways of overcoming stress;
- increase the support needed by employees;
- ensure a good level of cooperation within employees;
- clearly define disciplinary procedures;

- establish a supportive working culture in order that employees feel integral to the organization and are motivated to achieve its goals;
- offer employees the necessary support and information for developing their career;
- encourage flexible work schedules;
- try to manage the change process in a way that employees cannot become stressed due to it.

3. Case study - aspects of stress perception of entrepreneurs and managers from Bihor County

The proposed research was conducted by using the database of the project "Flexibility and performance through management" developed in partnership by the Faculty of Economics and Business Administration, University of Craiova and the Faculty of Economics, University of Oradea as a partner, no of contract POSDRU/81/3.2/S/57620, implementation period: 12/02/2010 to 01/31/2012 in the amount of: 2,137,229 lei.

The project's general objective is to develop the professional skills of general managers in order to prepare them to promote the adaptability and the introduction of new technologies. The specific objectives are: the professional training of 180 entrepreneurs and SMEs managers from two development regions in order to promote new forms of work organization and new technologies with reduced environmental impact; the increasing of informational level of the target group entrepreneurs and managers when talking about the necessity of introduction and the compliance of safety and health rules at work.

Further the study will be referred to the target group of the NW - Bihor County.

Research Methodology

This research is a descriptive one and its aim is to provide an image at a certain time on the studied phenomenon - stress. For implementation of this quantitative research was chosen as a research method - the survey. For this purpose, a structured questionnaire was developed in two parts with 35 questions.

The target population is the target group - Bihor County entrepreneurs and managers, participants in the course of the project - "Flexibility and performance through management", project financed by the European Social Fund - "Invest in people". The database of the target group - entrepreneurs and managers from Bihor County is based on online questionnaires. This database has a total of 75 entries.

The respondent's structure

In terms of affiliation to a business category entrepreneur/manager, 40% of respondents are entrepreneurs and 60% are managers at all levels within the SMEs.

Gender structure. The share of women in the total number of respondents is 40%, 60% are men.

Age. Taking into consideration the age in completed years, the situation is as follows: 16%, 18 – 24 years, 73%, 25 – 45 years, 9%, 45 – 54 years, 2%, 55 – 64 years.

Regarding family status, most participants are married (62.8%), 34.8% are unmarried, 0.04% being divorced.

Stress and stress concerns

45% of respondents work more than 48 hours per week. In these circumstances, it is not surprising that 70% of respondents believe they are affected by stress (Fig. no. 2).

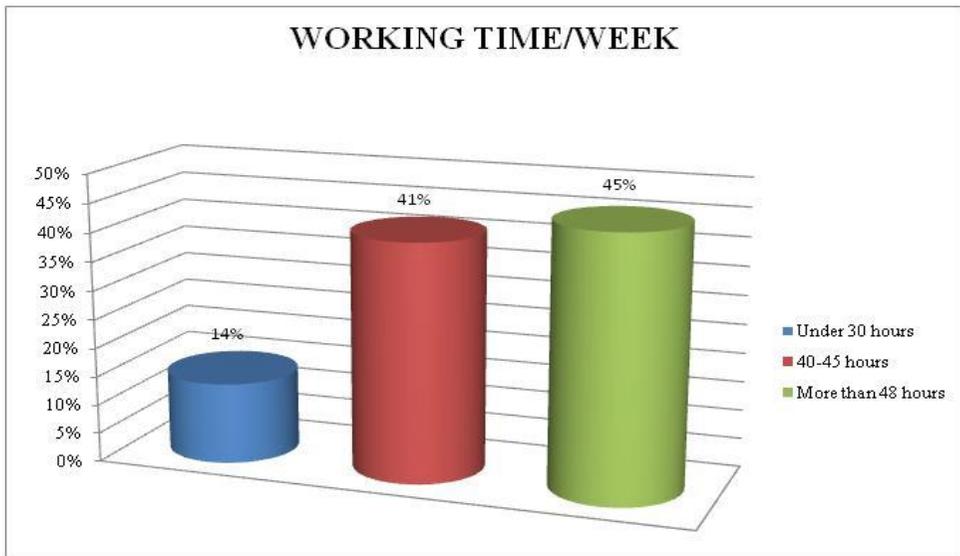


Figure no. 2 Working time/week in the case of managers and entrepreneurs from Bihor County

It follows therefore that a larger number of respondents believe they are affected by stress. 69% say they are concerned about stress, but only 21% say they have adopted measures to combat stress. Also a small number of managers (18%) say that the organization in which workers have been taken measures to combat stress. (Fig. no. 3))

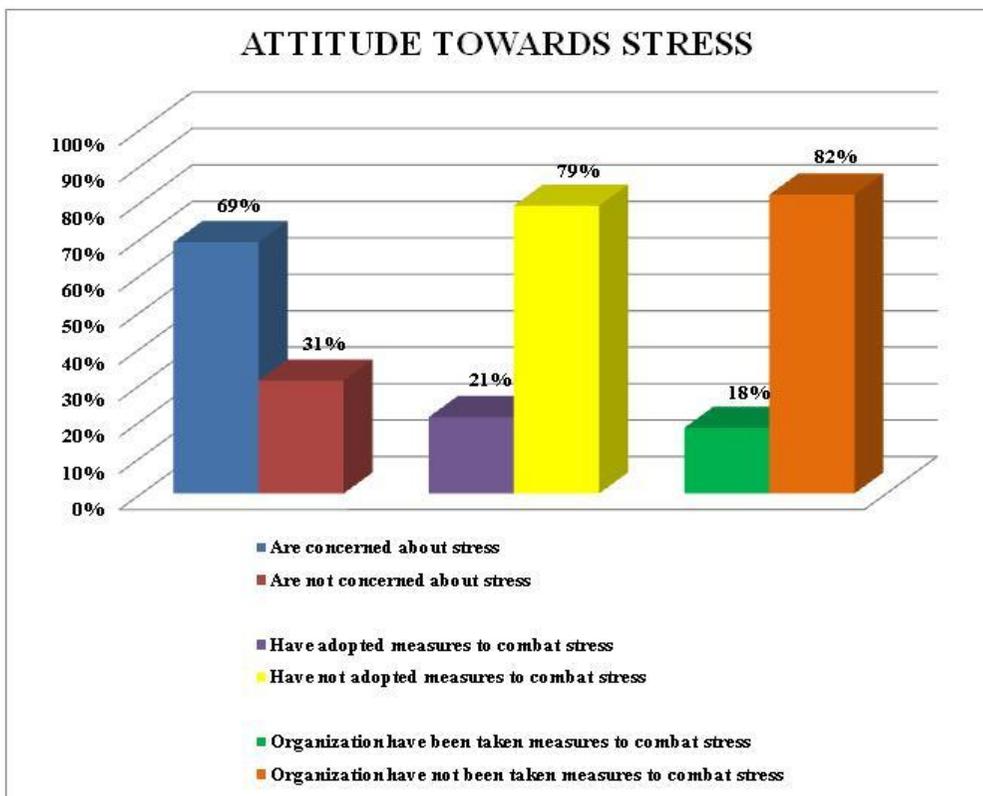


Figure no. 3 Managers, entrepreneurs and organization's attitude towards stress

To a large extent (85%) respondents considered that work is the main source of stress in their lives. (Fig. no. 4)

The main stress factors

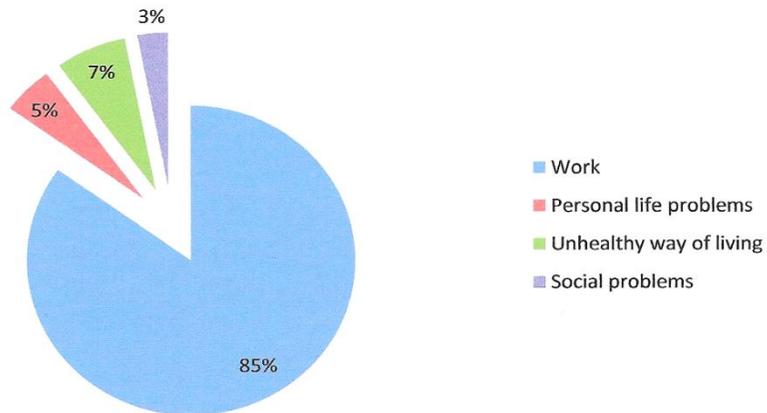


Figure no. 4 The main stress factors

Over 65% of questioned people said they would continue to work even if they did not have any financial need. Many managers, however, (60%) would prefer "to work elsewhere."

A minority of respondents (16%) say that there are situations in which stress motivate them to act in order to achieve something - it is positive stress (eustress); but the most common is negative stress (distress), when body and / or mind begin to respond negatively to stress agents. Over 85% of respondents considered that the stress level is much higher now as compared to five years ago.

4. Conclusions

According to the conducted cross research the conclusions are the following:

- entrepreneurs are more stressed than managers;
- women entrepreneurs/managers are more stressed than men entrepreneurs/managers;
- married entrepreneurs/managers are more stressed than unmarried entrepreneurs/managers;
- the majority entrepreneurs/managers believes that stress level is much higher now as compared to five years ago;
- the entrepreneurs and managers are concerned about stress;
- on personal level, entrepreneurs/managers usually fail to take measures to combat stress;
- within the organization are generally not taken measures to combat stress;
- the situations in which stress motivate entrepreneurs/managers to act to achieve something are rare;
- entrepreneurs/managers believe that work is the main source of stress in their lives;
- entrepreneurs/managers would continue to work even if they did not have any financial need;
- most of managers would prefer "to work elsewhere".

Concluding, although the work is considered the main source of stress, not the work itself is stressful, but the conditions and social environments in which it unfolds.

Notes

- (1) “Types of stress – some good, some bad”, Accessed April 18, 2011.
http://www.stressfocus.com/stress_focus_article/types-of-stress.htm
- (2) Agrawal. Rita. *Stress in life and at work*. London, England: Response books Publishing House, 2001.

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THE ADOPTION/ADAPTATION OF THE „SUPPLY CHAIN” CONCEPT IN ROMANIAN

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There are several terms used in Romanian for the English term supply chain. We have counted eleven. It has been adopted in several ways and it is perceived (adapted) in several ways in Romania. There are several causes which have determined this fact: the English terminology inconsistency regarding supply chain has been translated into other languages, professionals roots determine the usage (logistics professionals use it for logistics, strategic logistics use it in general etc.), the lack of Romanian discussions regarding the new professional terminology at general level and supply chain and logistics in particular. We expose the different ways by which supply chain is reflected in Romanian, we discuss the causes which have generated this total confusion and then we suggest a proper term for supply chain in Romanian, considering the real meaning of the term and the strategies adopted by other countries regarding supply chain adoption. In conclusion, we propose a general adoption and adaptation for the term in Romanian.

Keywords: supply chain, logistics, strategy, adoption, adaptation.

JEL: M29, M19, L19, M31

Introduction

One major and troublesome issue that we are confronted within all branches of the economy is finding adequate equivalents for the Anglo-American terms that prevail in the global terminology of economic theory. This is far from being solely our problem; in fact, all nations that do not use English as their native tongue have to cope with it, either by adopting the Anglo-American term as such or by designating an equivalent term in the local language.

For a variety of reasons, such as nationalism, educational necessity, local customs, each nation has developed its own approach to this matter, either accepting or rejecting the Anglo-American terminology and producing substitute terms that render the meaning of the English term more or less accurately.

We believe that it is the experts' duty to discuss and clarify such issues. Unfortunately, a significant amount of knowledge and information relevant to this topic (including lectures, conferences, etc.) is delivered in foreign languages and Romania is no exception. As a result, the terminology reaches the practitioner in an inconsistent and confusing form, generating chaos and lack of professionalism on the long term. This haphazard adaptation to local economic cultures more than often results in the loss of certain meanings that the term may convey in the original language. The terms are thus adapted to the precarious level of knowledge pertaining to the area in question.

The purpose of this article is to clarify the usage of the terms „supply chain” (SC) and „supply chain management” (SMC) in Romanian. If any such term would make the object of a similar article, the magazines would definitely become chock-full with trivia. However, this term is

crucial to several areas. The Romanian equivalents of these terms are used by professionals and researchers from various branches of management: strategy, logistics, production, service, and also by researchers from different areas of economy, such as marketing, finance, accounting, economic IT, engineering. These terms owe their importance not only to their extensive usage, but also to their relevance in the daily economic routine. A significant number of companies do not exist as autonomous entities anymore, but rather as links of these supply chains (SC). Competition occurs now between supply chains, rather than between individual companies (Verduijn, 2004).

This article is designed to clarify the problem of these two terms and to suggest adequate Romanian equivalents for them. The aim of this paper will be approached in several steps:

1. In the first part of the article, we will define the SC and SCM according to foreign researchers. The aim of this first part is to identify the multiple facets of these terms. The English notion of SC appears to be quite problematic and so does the consistent and comprehensive understanding of the SCM concept;

2. The second part of the article includes examples of this term's usage in Romanian, highlighting the variety of terms used and the randomness that seems to govern such usage. The term was appropriated by the Romanian language in a disorderly fashion, through a variety of arbitrary adaptations. We found a number of eleven terms that are supposed to render the Anglo-American term of supply-chain, which will generate in turn eleven possible interpretations of SCM;

3. There are two alternatives for an adequate appropriation: we either keep the Anglo-American term or suggest an optimal Romanian equivalent. Our suggestion is based on the common understanding of the term SC in English. It is vital to find a term that will be accurately construed by the majority of experts and convey, after the word „management” is added, the generic content of the SCM in English.

1. SUPPLY CHAIN AND SUPPLY CHAIN MANAGEMENT – ACCEPTED INTERNATIONAL DEFINITIONS

The term „supply chain” does not exist per se. It was highlighted by several researchers in the area of Supply Chain Management (SCM). First of all, we will introduce the main SCM schools and their SCM implementation paradigms. We will then shift the focus of our attention to the globally-accepted definitions pertaining to the supply chain, emphasizing several aspects regarding the perception of the SCs. We will conclude this section of the paper by presenting the main definitions of SCM and the processes normally included in the scope of SCM.

1.1 Supply chain management schools

From an organization theory point of view, the concepts of SC and SCM have emerged simultaneously with their systemic perception. The system theory of the 20th century provides a radically different organization-related paradigm, i.e. the transition from an atomistic representation of a company's constituents to a relational representation that marks a leap forward rather than a superficial improvement of older theories regarding organizations. The organization is a system made up of several sub -systems that may in turn be made up of several sub – sub – systems that interact. The organization is part of a greater whole, being a system open to its environment.

There are several groups of authors (generically called schools) that interpret the place and role of SCM at organizational level. Bechtel and Jayaram have initially identified four schools (p. 2):

1. The first school among those mentioned by the authors is the one **that is primarily aware of the functional chain** that has to be coordinated. A definition was provided by Houlihan in 1988: „SCM enables the flow of goods from the supplier to the manufacturer, to the seller and to the

final consumer". The emphasis is therefore laid on both flow of materials and agents involved in this flow. One source of this view is Porter's value chain (Delfman and Albers: 2001, p. 3);

2.The partner relationship or logistics school is the next mentioned school. This one focuses on the coordination of the relations between the partners, which may lead to the improvement of the competitive advantage. According to Turner (1993) „SCM is a process that includes all the relations within the chain between the suppliers, various levels of production, storage and distribution to the final consumer". With its authoritative voice, this school has succeeded in dominating the discussions on SCM for years, taking credit for coining the term and often claiming that SCM basically means logistics management at SC level (as an example. And yet, SCM means more than the flow of goods management within a SC (Cooper et al., 1997, Ilieş and Crişan, 2008b);

3.The informational school emphasizes the flow of information between the partners of a SC. Johansson defines the SCM in these terms (2004): „The SCM's primary requisite is that all members of a SC are well informed. With the SCM, information flow becomes a critical element of a SC's overall performance";

4.The integration or process school looks past the various agents of the SC and emphasizes the processes carried out along the supply chain. Cooper, Lambert and Pagh provide a definition in 1997: „the integration of the processes within a SC is what we call SCM". Bowersox and his collaborators also take notice of this aspect: „SCM is the collaboration between companies to the purpose of improving the strategic position and operational efficiency of a SC". They regard the SCM as a universal strategic alternative, as any company is able to choose this integration and informational & managerial dependence alternative.

A new school of thought pertaining to SCM has recently emerged: the collaboration school (Verduijn, 2004), with Mentzer as a notable representative. He defines collaboration as a long-term relationship between organizations, in the sense of a common pursuit. Collaboration has become evident in practice, as several companies work together in order to exercise an adequate management of the SC: planning, execution, performance assessment, all these are performed jointly. In our view, there are no significant differences between the integration school and the collaboration school. These schools have brought the concept into popular awareness, making a valuable contribution to the development and improvement of the public perception of SC and SCM. The use of these terms is relatively recent. In 1995, at the annual conference of the Council of Logistics Management, only 13,5% of the papers contained the term „supply chain", whereas in 1997, the term was already contained in 22,4% of the papers (Mentzer et al., 2001). However, it was the globalization of the big corporations' activities, the global competition and the advances in IT, rather than the popularization efforts of these experts that persuaded most of the practitioners that collaboration is the only viable solution for the future. This collaboration generically designated as SC and SCM was and still is subject to an ever-evolving perception.

1.2. International definitions of supply chain

In fact, the definitions regarding the SC are scarce in the international specialist literature, as most authors rather insist on clarifying the concept of SCM. For a given company, three levels of SC can be defined (Mentzer et al., 2001): direct supply chain – it includes the company, a supplier and a customer that participate in the upstream or downstream flow of a product, extended supply chain – it includes the company, the supplier's immediate suppliers as well as the customer's immediate customers and fundamental supply chain – it includes all the suppliers and customers involved in the production and delivery of the product, both downstream and upstream.

A similar perception is that a SC can be identified as company-related (the totality of closely-related partner companies upstream and downstream), product-related (the totality of companies

that contribute to the manufacturing of a specific product of the company) or generically company-related (all the partners involved in the production and delivery of all products (Quyale, 2006).

It should be noticed that the differences concern the perception of the SC, not the SC itself. Some perceive and understand it to be rather narrow (the extent of the SC depends on the collaboration between the companies), while others think that a SC is extended, as it exists regardless of the collaboration between partners or the lack thereof. Mentzer's analogy is fully fitting (Mentzer et al., 2001): the river exists and the water flows downstream just like the products in a SC, regardless of the fact that someone becomes aware of the possibility of a global management of the river basin or not. If several states share the same river basin, only cooperation enables them to achieve clearly-defined goals pertaining to it, as none of them taken separately would be able to implement decisions for the entire basin because of existing state borders. The SC (the riverbed) and the flow of goods (the water) exist anyway, with or without SCM. A company is usually part of several SCs. A company acts as a supplier for many customers and each of them represents a new SC with its customers. The companies create supply for the customers together, irrespective of whether they do it in a coordinated or uncoordinated manner.

The graph below depicts a generic SC in Wisner's view. It should be noted that a SC is a network consisting of suppliers of raw materials, manufacturers of semi-finished goods and parts, manufacturers of finished goods and distributors that are in charge of supplying the goods and services to the final consumer. In addition to the main flow of the SC, there is also a reverse flow of products (in the form of scrap or recycling materials – referred to in the Anglo-American literature as „reverse logistics”), as well as the flows that support these main flows: planning, information, activity integration .

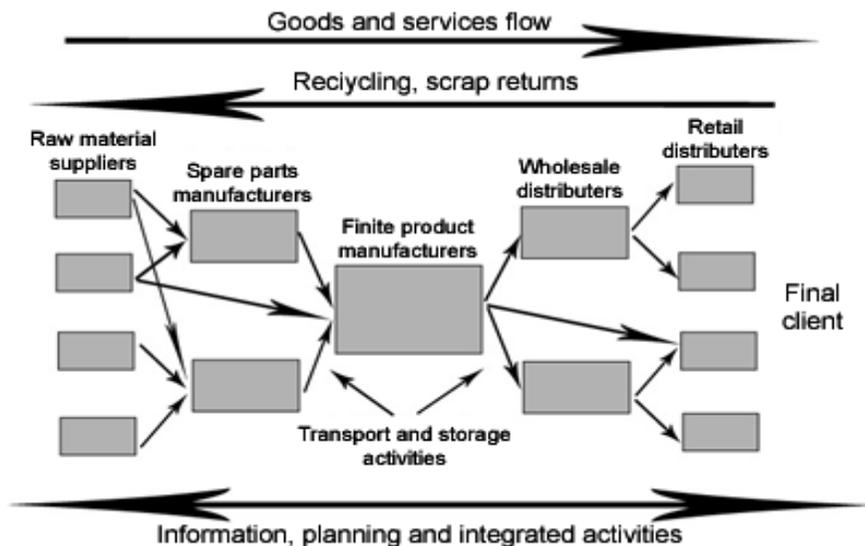


Fig. nb.1 Generic SC

Source: Wisner, J., Leong, K., Tan, K., Principles of Supply-Chain Management, South Western Publishing, Ohio, 2005, p.6

Frazzelle provides a definition of the SC, emphasizing its logistics side. With the fact that logistics is „the game that is played in the arena called SC” as a starting point, he defines SC as a network of locations (warehouses, production facilities, terminals, ports, shops, homes) vehicles (airplanes, trains, trucks, cars) and logistic data transmission and processing systems interconnecting not only the company's suppliers and the supplier's suppliers, but also the company's customers and the customers' customers (Frazzelle, 2001). However, Bowersox and his

collaborators (Bowersox et al., 2002, p.4) define the supply chain as a value chain or as a supply-generating chain made up by several companies, with no special emphasis on the logistic side of the SC.

It must be noted that most researchers stress the fact that a SC equals the group of companies that participate in the creation and delivery of a product, in the creation of supply and do not insist (Frazelle stands out as an exception) that SC refers only to those companies involved in the flow of goods, i.e. logistics. It is, in fact, the group of companies that participate in the creation of supply. For that reason, it is called a demand chain. In our view, logistics is only one of the many games that are played within a SC, such as marketing, production, R & D, SC quality and overall performance assurance.

1.3. International controversies regarding the designation „supply chain”

Although the explanations provided above seem to converge towards the acceptance of the fact that a supply chain is a group of companies that contribute to the creation of supply, things are conceptually more convoluted than they appear to be, as there are several controversies addressed below:

Controversy 1: Why supply chain rather than demand chain? Marketing experts have been recently trying to bring a deservedly neglected aspect back into public consideration, namely the fact that the term „supply” would imply that the group of companies work to produce a certain good for the customer (Jüttner et al., 2007, Thublier et al., 2010, De Treville et al., 2004, Charter et al., 2001). Marketing theories suggest that the company works to satisfy the customers' needs, i.e. the demand, therefore „demand chain” would be a much more appropriate term. Although we fully agree with that detail, it is now too late to change this designation because the term „supply chain” already has a long history behind and it's widely used to refer to this group of companies. Oliver and Weber have coined the term SC in 1982, while the critics of this term raised their objections as late as the 2000's, when SC and SCM were already widely-circulated notions. Demand chain continues to be used in SCs to designate the need of a marketing orientation towards the customer within the SC (De Treville et al., 2004).

Controversy 2: Why supply chain rather than value chain? The term „value chain” was devised by Porter in 1985 to highlight the company's sources of competitive advantage, that create value in the customer's perception, discerning primary and auxiliary activities. There are many similarities: both views, SC and value chain are systemic, process-orientated and aim to create value for customers. Although the value chain best describes the basic process within the SC, namely the creation of value, it may be argued that this term was doomed to fail in competition with SC from the very start, because of its primary function to describe activities within an individual company.

Both options demand chain and value chain roughly convey the same aspects: several partners and product manufacturing / delivery and even certain additional details: compliance with customer needs and creation of value. But things have been settled to a certain degree: SC is the term favored by most experts.

1.4. Defining supply chain management at international level

Supply chain management is one of the most used concepts in business. But, despite its popularity there isn't a general understanding of its meaning. SCM is seen either as a collaboration philosophy, either as management processes within a SC, either as just an operational concept from logistics (Mentzer et al., 2001, Burgess et al., 2006).

As a philosophy, SCM is perceived as seeing a SC as a single entity, not as a conglomerate of several companies. The degree to which SCM is implemented should be reflected in the way the partners are collaborating, the success of the operation as a whole. SCM philosophy would require

synchronization and convergence , both inter and intra organisational (Mentzer et al., 2001). It should be rather an orientation of a SC, a philosophy that can be implemented further .

As management processes, SCM is defined as all the activities concerning planning, organizing, coordinating, and controlling at supply chain level, aimed at serving customers better and meeting their needs. We refer to management of materials , information, and all business functions at SC level. If we have an integrated management, then we have a successful SCM. Among the managerial processes, we recall (Mentzer et al., 2001): customer relationship management, customer service management, order management, production management, supply management, innovation management, sales management, logistics management.

SCM is less often confused with logistics operations at SC level. We will not dwell on this issue, but we will give definitions according to this view of SCM.

The definitions that we found are consistent with international perception of SCM:

1. We found the following definitions that reflect SCM as a philosophy, as a strategic alternative for any organization:

- Christopher (2008) (Jüttner et al., 2007): SCM is the relation management with partners upstream and downstream, in the sense of creating value for the end customer, at a minimal cost, on the whole SC.

- Handfield și Nichols (Van Goor, 2001): In order to obtain a competitive advantage, companies need to operate on SC level. Only a SCM at SC level enables faster delivery, achievement of better and cheaper products than the competition;

- Croxton (2001) (Gundlach et al., 2006): Integration of key business processes from end customer to the most distant suppliers, with the purpose of creating value for customers and stakeholders as a whole;

2. Most definitions are at the level of management processes within the SC:

- Mentzer (Mentzer et al., 2001): SCM is the strategic and systemic coordination of the conventional functions, and also the tactical coordination of these functions, both at the firm level and at the SC level, in order to improve the company's long term performance and the SC as a whole;

- Chan și Lee (2005) (Gundlach et al., 2006): SCM is the efficient management of the complete processes (from customers to suppliers) of design, planning, supply;

- Institute of SCM (2005) (Gundlach et al., 2006): SCM is the design and ongoing management of processes crossing organizational boundaries to meet customers' needs;

3. At operational level, SCM is defined mainly by logisticians, who see SCM as a logistics management at SC level:

- Novak și Simco (1991): SCM covers the flow of materials from supplier to manufacturer to end customer;

- Lee și Covey (1995) (Jain et al., 2010) define SCM as the integration of the activities taking place within a network of facilities for the purpose of materials' supply, their processing, and delivery of products through a distribution system;

- CSCMP (Council of Supply Chain Management Professionals): SCM is the management of all activities related to supply, conversion and all logistics activities at SC level (Gundlach et al., 2006);

- Charter (2001) argues that practitioners perceive SCM as only the management of the flow of goods at SC level .

What is apparent in these definitions is their evolution. Three issues were included in all definitions, the evolution making sense by extending the coverage of these issues (Stock et al., 2010): the activities within SCM, SCM benefits and SC actors. Activities under SCM have evolved from the management of logistics activities to information management, management of the relationship with partners and of the overall performance. The benefits have evolved from

cost and service related to logistics to strategic benefits, increased customer satisfaction, increased effectiveness and efficiency at SC level. The actors have evolved according to perceptions of a SC exposed in this article.

In addition to the definitions of SCM, we believe that are important the processes assigned to SCM by specialists. We used multiple sources to see if SCM refers only to logistics management at SC level. The conclusion is clear: no, SCM is much more. SCM includes the following processes (Burgess et al., 2006, Verduijn, 2004, Van Goor, 2001): strategic leadership, intra- and inter-organizational relationship management, logistics management, continuous improvement - quality management, management information systems, performance management, marketing processes, R & D, product design.

In conclusion, the inconsistency concerning the terms of SC and SCM is caused in part by an ongoing evolution of the business terminology on international level, due to economic development, its globalization, to the high interest from specialists from many related areas connected to these terms. Each tries to shoot fire from his pot and thus create confusion.

Majority rules - this is what we think on the perception of SC and SCM. It is obvious that this first part of the article shows that a supply chain is a group of companies (conglomerate, network) involved in production - delivering a product and that SCM is the management of the relationship between companies. Not only it refers to logistics, nor just the logistics management system or group of companies, being a much broader concept.

2.USING IN ROMANIAN THE TERM CORRESPONDENTS OF SUPPLY CHAIN

Further on, we still insist on what we found in the literature and especially on the Internet on SC and SCM in Romania. We have not found any author who insisted on this issue, we never found an author outraged by using more terms to fill the corresponding English one.

Adoption of the terms SC and SCM in Romanian took two forms:

I..Not translating in Roumanian is the first form. This aspect we noticed in the following cases: Vicepresident ARILOG (Romanian Association of Logistics) does not translate this term (Dumitru, 2008), retaining the Anglo-Saxon form; the logistics magazine retains the term supply chain (eg. Tutunaru, 2010); at Alexandru Ioan Cuza University in Iași, in 2010, is a Management specialization course, third year, called supply chain management;

II.A second form involves finding correspondent words for SC and SCM and hence their adaptation to the context used, the experience of the researcher. There is no lower or wider use of these terms, further exposing them alphabetically:

1.,,Lanț de aprovizionare – desfacere” - procurement- sale chain is a term used in the same paper in which there is the term „lanț de distribuție” (Fotache and Hurbean, 2006);

2.,,Lanț de aprovizionare – distribuție” , procurement- distribution chain is a term used by several consulting firms in the field (Tradeconsult, 2010, CAT, 2010);

3.,,Lanț de aprovizionare – furnizare” , procurement-supply chain is a term used at the Polytechnic University of Timisoar (Mocuța, 2009);

4.,,Lanț de aprovizionare” , procurement chain is a term used at the Academy of Economic Studies (Pelau, 2007);

5.,,Lanț de aprovizionare și producție” , procurement and production chain is the term used by the experts from Romania for SC Unilever (Unilever, 2010);

6.,,Lanț de aprovizionare-livrare” , procurement-delivery chain is a term used in the Academy of Economic Studies in one of the most extensive work on logistics in Romania (Bălan, 2006);

7.,,Lanț de distribuție – aprovizionare” ,distribution-procurement chain is a term used by some consulting firms in the industry (Training&Consulting, 2010);

8., „Lanț de distribuție”, distribution chain is a term used at Iași for SC (Fotache and Hurbean, 2006), but also by those who drew up a glossary of terms at the University of Târgoviște (ECR, 2008);

9., „Lanț de ofertă”, offer chain is a term used also in the Academy of Economic Studies, in collaboration with a teacher in the U.S. (Glasser et al., 2006);

10., „Lanț logistic”, logistics chain is used both at the Babes-Bolyai University in Cluj (Ilieș and Crișan, 2008a), and at the Academy of Economic Studies (Belu, 2008, Țarțavulea and Bănac, 2009);

11., „Procese de aprovizionare și livrare”, Supply and delivery processes is a term used by Microsoft representatives in Romania (CG-GC, 2010)) at a presentation of Microsoft Dynamics Nav.

From these details we can see following:

-There is no uniform designation for SC and SCM in Romania;

-Change does not take into account the geographical area of origin nor the affiliation to academia or business of authors ;

-There is a lack of standardization and lack of correlation between the work of multiple authors;

-English translation of the term supply is deficit, in this context supply means offer and not procurement. Supply is the offer created by members of SC.

-There is an almost general mistake of charging a SC, insisting on the logistics side of it. Except the term of section 9 (offer chain), we can see that things took a nasty turn. On the one hand that supply is translated as procurement, and on the other hand the limitation of perceiving SC as a logistics chain or logistic relationship (procurement, delivery, distribution, supply, sale) is an aspect that affects negatively the research, reducing the activities at SC level ;

In an attempt to clarify the situation, we looked to see what happened in other Latin languages borrowing the two terms:

-In Italian the term has remained untranslated, AILOG (Association in Italy) has the original name: Associazione Italiana di Logistica e di Supply Chain Management;

-In French the term was adopted by a regulatory body language (general delegation of French and other languages of France - DGLFLF): SC is used as "Chaîne logistique", and SCM is used as „la gestion de la chaîne logistique”. However, what we noticed is the parallel use of another term for SCM: „management et économie des réseaux”;

-The Spanish language uses two names: „Cadena de Suministro” (procurement) and “Cadena de Abasto” (distribution);

-The Portuguese used the term “Cadeia de fornecimento” (supply chain).

We can notice the similarities between the translation attempts in Romanian and in other Latin languages. It is also apparent that there is a larger unit for the treatment of these terms, in our research we discovered no more than three terms in each language corresponding to the Latin for SC or SCM. We believe that we need a larger unit also in Romania.

3. Conclusions

The proposals that we make below are rather pragmatic and not one hundred percent correct from grammar or literary point of view. It is clear that the Romanians feel the need to translate these terms, that's why we deal with such confusion at both academics and the business environment. Italian option to not translate this term cannot be taken into consideration.

For the term supply chain we must consider what it really means: all the companies participating in production and delivery of a product, in creating supply. This supply chain exists even if there is coordination between firms, and even if this cooperation between companies is not present. It is obvious that all terms used in Romanian reflects the operational side – at the 2000s level in international logistics. How we currently not have a term like supply chain that will not reflect

reality (ie reality demand chain or value chain), any term which will not narrow the academic and business vision only to operational, logistics aspects, is welcome .

Another problem is the use of the term “chain” until now. The chain is rather a linear form of links between different nodes. The term chain is right at the operational level, from where he was taken. Neither the term “rețea” network is appropriate because the network would require direct interconnection of all its members, this aspect being more or less noticeable at SC level because of the sharp division between the raw material suppliers, manufacturers, distributors etc. At the strategic level was used often the term distribution channel. We believe that companies that create together the offer, are making at the same time a downstream channel towards upstream of the materials and products to the customer. But the term channel is not usable because of the connotations related to distribution and logistics.

Proposal 1: We propose keeping the term “lanț”, chain in English, due to the widespread use of this term already. Although does not reflect reality, but rather the structure of the SC as a tree, we believe that the term chain suggests the links between partners.

The long form of the supply chain in Romanian would be “lanțul creării ofertei “, in English the chain of creating the offer, but it has three words and things would become too long.

Proposal 2: To customize the chain and give a similar connotation to SC, we propose to use the association „lanțul ofertei”-“supply chain” to denote in Romanian the term supply chain from management. It reflects all the definitions set, and can be converted into “Managementul Lanțului Ofertei”- supply chain management without diminishing and affecting theoretically any of the relevant points for both concepts, at international level.

Regarding the supply chain activities, as outlined in the study of literature, it is clear that not only logistics “play” in it. Management implementation of supply chains at first is to be made at operational level and the benefits of cooperation between companies are particularly relevant by optimization of logistics activities. But these are the first step towards an efficient SCM. Other processes can be integrated, according to international literature: marketing, quality, sales, innovation, etc..

Definition 1: “Lanțul ofertei”-the supply chain represents all firms participating in the production and delivery of products or services, in other words creating the market-supply.

Definition 2: “Managementul lanțului ofertei”- supply chain management is perceived as all managerial processes at the supply chain level (inter-organizations). It includes several processes: strategic management, marketing, production management, innovation management, research and development, computer network management, logistics management, customer relationship management, sales management etc. These processes can be performed at the supply chain level to a lesser extent or may be implemented in full. These things depend on the coordination of a unified supply chain or a less coordinated existence of it.

We believe that the two terms and general definitions are clear and comply with international requirements, in order to be widely used in Romania. We are willing to consider other solutions scientifically justified.

4. Notes

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HOW FUTURE MANAGERS VIEW SOCIETAL CULTURE: A CROSS-COUNTRY COMPARISON

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Our study aims at enriching the existing literature about the prospective managers' view of an ideal societal value system and the existing cultural practices in their society. The findings about the students' perception on cultural practices and their expectations about societal culture are helpful in imagining the societal culture in its dynamics. The research sample consists of 727 students in business and engineering on undergraduate and graduate levels from Romania and Slovenia. The reason we have chosen to compare Romanian sample with the cultural profile of the "average" future manager from Slovenia is the scientific curiosity of finding out if there are signs of cultural convergence of Romania with a previous communist country, and an older member of European Union. In doing so, our study will hopefully broaden the body of knowledge about the cultural convergence (or divergence?) between the former socialist countries joining European Union. The theoretical and methodological foundation is rooted in GLOBE international research project. Our findings revealed that at practices level, Romanians perceive significant higher Power Distance and significant lower mean value for Uncertainty Avoidance. At the expectations level, the Romanians and Slovenians are very similar in the desire concerning their societies orientation toward In group/Family Collectivism, Assertiveness and Performance Orientation, and record significant differences in all the other societal values. The fact that for all the cultural expectations the future managers assign different mean values than for the correspondent practices make us expect that they will act to change their cultural environments. Still, the cultural orientation of Romanian future middle managers will differ in many regards from the Slovenian sample averages.

Keywords: societal culture, cultural practice, cultural value, Romania, Slovenia

JEL classification: M14, M19

1. Introduction

Starting from GLOBE international research project dealing with top and middle managers, GLOBE STUDENT project was initiated (2008)^{*****}, aiming at targeting future managers, to be recruited mostly from today's students in business and engineering. One of its objectives is to determine the profile of future managers from their perceptions on and expectations about societal culture dimensions point of view. *The main research question concerns the similarities and differences between the Romanians with the average future manager in Slovenia.* The reason we have chosen to compare Romanian sample with the cultural profile of the "average" future manager from Slovenia is the scientific curiosity of finding out if there are signs of cultural convergence of Romania with a previous communist country, and an older member of European Union. In doing so, our study will hopefully broaden the body of knowledge about the cultural convergence (or divergence?) between the former socialist

^{*****} The project is co-ordinated by R. Lang from Chemnitz University of Technology. The data for Slovenia has been collected by D. Pucko and T. Cater (University of Ljubljana)

countries joining European Union. Specifically, we will try to answer the following *research questions*:

1. Which are (if any) the significant differences between Romanian students' perceptions of current societal practices and those of students from Slovenia?
2. How do Romanian students' societal values (expectations) differ (if) from those of students from Slovenia?

2. Theoretical background

As known, there is no single generally accepted definition of societal culture (Chhokar et al., 2007:3). Our study shares the definition used by GLOBE international research project: "shared motives, values, beliefs, identities and events that result from common experiences of members of collectives and are transmitted across age generations" (House et al., 2002: 5). The GLOBE project distinguishes between *practices* ("as it is") and *values* ("as it should be"). Values distinguishing a culture from the others are predictors for cultural practices, as well as for leadership features and behaviours in that culture (House et al. 2002). In all societies, the shared values become good predictors of *future practices*.

GLOBE project operationalised culture in nine *dimensions*: 1) Uncertainty Avoidance; 2) Future Orientation; 3) Power Distance; 4) Collectivism I (societal collectivism); 5) Humane Orientation; 6. Performance Orientation; 7) Collectivism II (in-group collectivism); 8) Gender Egalitarianism; 9) Assertiveness (House et al., 2002: 5-6). As the GLOBE researchers acknowledge (House et al., 2002: 6), the first six dimensions are rooted in cultural dimensions defined originally by Hofstede (1980), Future Orientation and Humane Orientation from Kluckhohn & Strodtbeck (1961), Putnam (1993) and McClelland (1985), while Performance Orientation from McClelland (1985). Short definitions of these cultural dimensions are given in GLOBE related book (House et al., 2004:3).

Our research compares the cultural foundations of prospective managers and leaders in Romania and Slovenia. The findings about the students' expectations about societal culture are helpful in imagining the societal culture in its *dynamics*. Accepting that values "high in centrality, pervasive, and supported by powerful sanctions and high consensus and supporters of these values hold positions of high prestige and authority" (Williams 1979: 34) are resistant to change, we also are aware that they change especially when one generation succeeds another (Keating et al., 2002: 637).

3. Methodology

GLOBE student project uses the section 1 (*as it is*) and, respectively, section 3 (*as should be*) GLOBE research *Beta* questionnaires (House et al., 2004) with some modifications required by the subjects' nature (students). Scales in section 1 ask the students to value "the way our society is" (practices), while scales in section 3 ask the students opinion about "the way our society should be" (values) using a seven points Likert scale. The surveys were carried out in either 2008 or the first half of 2009. The respondents are enrolled at the Technical University of Cluj-Napoca, Babes-Bolyai University (Cluj-Napoca) and Petru Maior University in Targu-Mures (Romania) and at University of Ljubljana (Slovenia). Table 1 shows the joint sample structure of our respondents, which gave us usable data.

Table 1: Sample structure

Country of origin	What subject area/ study path do you study?		Total
	Business/ Economics	Engineering	
Romania	166	261	427
Slovenia	150	150	300
TOTAL (valid answers)	316	411	727

Collected empirical data has been processed with SPSS 17. Descriptive statistical analysis was carried out separately for Romanian and Slovenian sample. In comparing Romanian sample with the Slovenian one, the *independent samples t-test* was used, with 0.05 significance threshold.

4. Findings

The research findings concern: 1) differences between Romanian and Slovenian students' perceptions of current cultural *practices*; 2) differences between Romanian and Slovenian students' *expectations* concerning societal values.

4.1. Differences in perceptions: Romanian vs. Slovenian students

Table 2 displays the significant differences between Romanian and Slovenian sample with respect of perceptions of societal culture *practices*, while the differences between the mean values of perceptions on cultural practices in Romania and Slovenia are displayed in Figure 1

Table 2. Significant differences in cultural practices: Romania vs. Slovenia

Cultural practice ("society as it is")	Romania	Slovenia	Absolut differences	t-test (sig 2-tailed)
<i>Uncertainty Avoidance</i>	3.49	4.19	- 0.70	- 11.617 (0.000)
<i>Future Orientation</i>	3.44	3.79	- 0.35	- 4.659** (0.000)
<i>Power Distance</i>	5.81	5.03	0.78	12.306** (0.000)
<i>Collectivism I (Institutional)</i>	3.78	4.04	- 0.26	- 3.920 (0.000)
<i>Humane Orientation</i>	3.83	3.97	- 0.14	- 2.204 (0.028)
<i>Performance Orientation</i>	3.66	4.05	- 0.39	- 5.089 (0.000)
<i>Collectivism II (in group)</i>	5.13	5.22		(0.175)
<i>Gender Egalitarianism</i>	3.99	4.13	- 0.14	- 2.427** (0.016)
<i>Assertiveness</i>	3.51	4.24	- 0.73	- 10.587** (0.000)

95% confidence; *two independent samples; ** equal variances not assumed

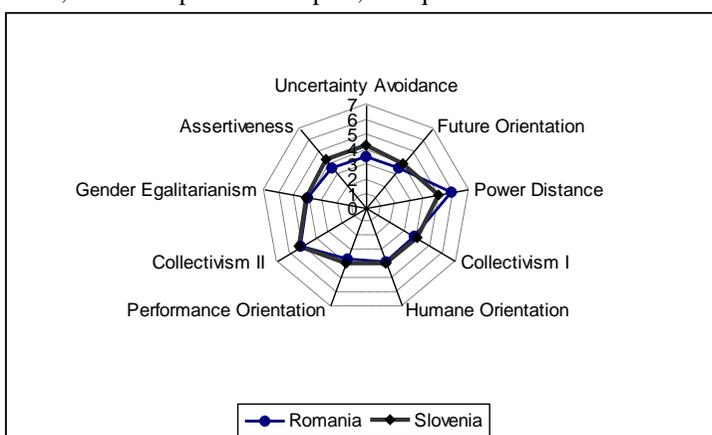


Figure 1. Differences in perception of cultural practices: Romania vs. Slovenia (mean scores)

T-test of differences between the mean scores (*two independent samples*) shows that the Romanians perceive significant higher Power Distance ($t = 12.306$; $\text{sig} = 0.000$) than the Slovenians (equal variaces not assumed). Significant lower mean values are recorded by Romanians for (decreasing order): Uncertainty Avoidance ($t = - 11.617$; $\text{sig} = 0.000$), Assertiveness ($t = - 10.587$; $\text{sig} = 0.000$), Performance Orientation ($t = - 5.089$; $\text{sig} = 0.000$), Future Orientation ($t = - 4.659$; $\text{sig} = 0.000$), Institutional Collectivism ($t = - 3.920$; $\text{sig} = 0.000$), Gender Egalitarianism ($t = - 2.427$; $\text{sig} = 0.016$) and Humane Orientation ($t = -2.204$; $\text{sig} = 0.028$). The lack of significant differences for Collectivism II (In group/Family) might be interpreted as a *convergence* in practicing tight relationships within membership group in both countries.

4.2. Differences in expectations: Romanian vs. Slovenian students

The data in Table 3 summarized the significant differences between the most appreciated cultural values by the future managers and leaders in the Romanian and Slovenia and the “spider” in Figure 2 reveals the differences between the average score of cultural expectations (values) in Romania and Slovenia.

Table 3. Significant differences in societal values: Romania vs. Slovenia (mean scores)*

Cultural value (“society as it should be”)	Romania	Slovenia	Absolut differences	t-test (sig 2-tailed)
Uncertainty Avoidance	5.10	4.55	0.55	9.427 (0.000)
Future Orientation	5.23	4.74	0.49	6.781 (0.000)
Power Distance	2.65	2.94	-0.29	- 3.737 (0.000)**
Collectivism I (Institutional)	4.94	4.46	0.48	7.069 (0.000)**
Humane Orientation	5.41	5.08	0.33	4.887 (0.000)**
Performance Orientation	5.89	5.78	0.11	(0.068)
Collectivism II (in group)	5.70	5.69	0.01	(0.824)
Gender Egalitarianism	4.42	4.55	-0.13	- 2.384 (0.011)**
Assertiveness	4.01	4.09	-0.08	(0.186)

*two independent samples; ** equal variaces not assumed

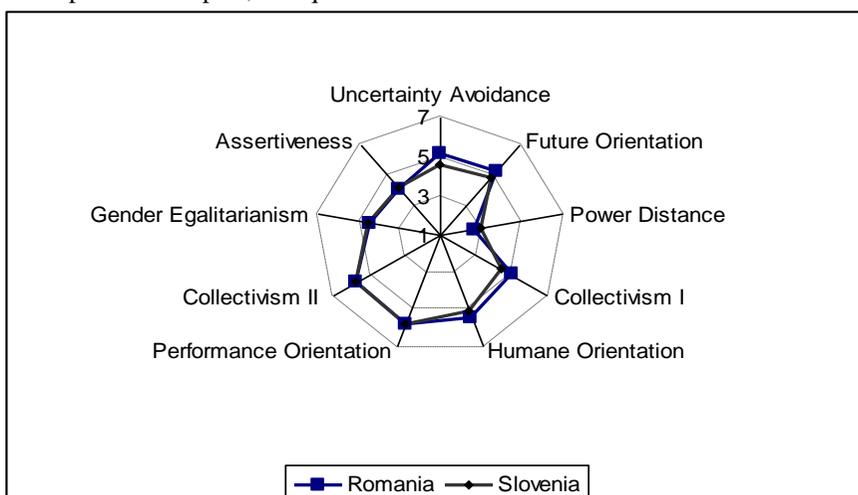


Figure 2. Differences between average scores of cultural expectations: Romania vs. Slovenia

As seen, there is no (or very low) difference between the mean scores ($p < 0.05$) of the compared samples expectations concerning Collectivism II, Assertiveness and Performance Orientation. Romanians expect significant higher Uncertainty Avoidance ($t = 9.427$; $\text{sig} = 0.000$), Collectivism I ($t = 7.069$; $\text{sig} = 0.000$), Future Orientation ($t = 6.781$; $\text{sig} = 0.000$), and Humane Orientation ($t = 4.887$; $\text{sig} = 0.000$) than the Slovenians. The highest statistically significant

difference is related to Uncertainty Avoidance. Significant lower expectations are recorded by Romanians for Power Distance ($t = -3.737$; $\text{sig} = 0.000$) and Gender Egalitarianism ($t = -2.384$; $\text{sig} = 0.011$). Given the mentioned findings can be argued that *some* Romanian cultural values (expectations) are convergent with the Slovenian ones (desire for higher performance concern of society, tighter relationships with the membership groups and stronger Assertiveness in defending/arguing own position). Even though the identified changes in cultural dimensions will occur in the future, we cannot speak about a *complete* harmonization of culture in the two countries under study.

5. Discussions and conclusions

The Romanians perceive actual cultural *practices* in their environment differently from Slovenians, with the highest difference for Uncertainty Avoidance (Romanians perceiving their society not being enough concerned with creating a stable legal, political and economic environment or with long term planning). Hofstede found in his research (Hofstede, 2002: 100) a very high level of Uncertainty Avoidance (mean score 6.16) in the Slovenian environment, while for Romania he estimated an index of 90 (http://www.geert-hofstede.com/hofstede_dimensions.php), suggesting that in the past socialist environment, the managers worked in a culture with a very high Uncertainty Avoidance. The GLOBE study identified a mean score of 3.78 for Uncertainty Avoidance for Slovenian *practice*, and a GLOBE type study performed on 216 Romanian middle managers, got to an average score of 3.92 for this cultural dimension (Catana & Catana, 2011). This shows that the processes of transition to the market economy brought “turbulences” in the “traditional” way of heaving someone taking care of things (through central planning in the case of Romania). The lowest difference is recorded for Humane Orientation (Romanian mean value, higher). Based upon these findings, cannot speak about a convergence in cultural practices perception.

Both samples display higher mean values for all nine cultural dimensions at *expected* level, except Power Distance in both samples and Assertiveness in Slovenian sample. Our findings show the Romanians and Slovenians are *very similar* in their desires concerning their societies orientation towards In group/Family Collectivism Collectivism II), Assertiveness and Performance Orientation. These findings might reveal a certain *harmonisation* of cultures within the compared countries. The highest significant (positive) difference between the samples is recorded for Uncertainty Avoidance, showing the Romanians desire to increase in a higher degree than Slovenians, the level of certainty in their society, including the long term planning. The lowest significant (positive) difference concerns Humane Orientation, revealing that the two samples record the same trend, towards paying more attention to encouraging and rewarding fairness, altruism, friendship, generosity, kindness and promoting altruistic ideals. Significant (negative) differences are recorded in expectations concerning Power Distance and Gender Egalitarianism. These two expectations reveal other “avenues” towards increasing the convergence in cultural values and future cultural practices (if the subjects holding such values/expectations will become managers and transform them in societal practices). Although according to institutional theory, changes in the more culturally embedded elements of management, seem to be more difficult to achieve (Lang/Steger 2002), the fact that for all the cultural *values* the future managers assign different mean values than for the correspondent practices make us expect that they will act to change their cultural environments. Still, the cultural orientation of Romanian future middle managers will differ in many regards from the Slovenian sample averages.

We are aware that our research findings have a few limitations, among which the assumption that business and engineering students will become a core part of the future population of managers. Beyond the limitations, we believe that our findings offer certain insights into relevant issues for

researchers, academics and consultants in management and leadership, as well as for today's practitioners, especially related to culture dynamics in the region. The dissemination of our research findings among active managers, researchers, academic staff and management consultants may contribute to improving the management training of students, as well as the management practices in Europe. Future research should focus on studying cultural practices and value systems in directions like possible differences in respondents' relevant perceptions based on subjects demographic characteristics (age, gender, field of study, major subject etc.). In addition, comparisons could be making with other countries taking part to GLOBE student project.

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REGENERABLE ENERGY, A KEY TO INTEGRATING COMPETITIVE POLICIES WITH ADVANCED ENVIRONMENT PROTECTION STRATEGIES

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Development of competitive policies and improvement of environment protection strategies are two basic trends of the development of the European Unique Market. Energy, also known as „industry bread”, is basic product and strategic resource, where energy industry plays an obvious role in the economic and social development of any community. Traditional energy production is marred by three major drawbacks: it generates negative externalities by polluting; it is totally in the hands of the producers; hence, prices rise at their will, of fossil fuels such as oil and gas.

Present study focuses on electric energy industry, yet bearing over the whole length of the chain producer-to-end-consumer, thus revealed as particularly complex. The question is do alternative energy sources meet the prerequisite of market being competitive meanwhile environment protection being highly observed. We identify limits in point, of the energy market; effects of market liberalization; entry barriers; interchangeability level of energy sources; active forces on the energy market.

Competitive rivalry has been expressed as per market micro-economic analysis, based on Michael Porter's 5-forces model.

It will thus be noticed that, morphologically, competition evolution depends firstly on the market type. For the time being, the consumer on the energy market stays captive, for various reasons such as: legislation; limits of energy transfer infrastructure; scarcity of resources; resources availability imbalance; no integrative strategy available, of renewable energy resources usage. Energy availability is vital for human society to function.

Comparative advantages of renewable energy resources are twofold, as manifested: in terms of economics, i.e. improving competition by substitute products entered at the same time as new producers enter market; and in terms of ecology, by reducing CO₂ emissions. As to energy production technology and transfer, the complementary nature will be noticed, of renewable energy resources, such nature manifesting itself as a 6th force, „the force of complementary products” apt to stimulate low competition on the energy market.

Key words: competition, environment protection, renewable energy, strategy

JEL M11-Q42

1.General

The action of competition operates primarily when the prices are free, which can make any buyer to freely search and pick the seller with the lowest prices, encouraging also the producer in his action of searching for new clients. In the energetic market, its limits are clearly visible. Taking into account that the action of the competition on the market is an expression of the market development degree, the economic liberalization degree, this theme represents some constant interest. Competition challenge and environmental protection is able to stimulate the creativity of the economical agent in his action in effective exercise of economic activity.

In Romania, as well as in other countries, markets have undergone drastic changes, of services industries based on infrastructure nets, such as electricity, water, gas, railway and telecommunication. Such changes are manifested as privatization; subsidiarizing; and retechnologization. Besides these three, common to various industries, dereglementation works now on the energy markets, i.e. markets traditionally serviced by public enterprises, become open to competition.

Owing to the scarcity of market agents and to the rising efficiency figures of developing electricity networks, energy transfer and distribution comes close to the natural monopoly model by the book.

Energy peculiarity is its non-stocking nature, balancing being needed at each production/consumption moment, in its basic meaning market mechanism not manifesting itself

prone to self-balancing: the large production-transfer integrated enterprises have taken over such balancing function, i.e. technically managing energy flux in real time.

Dereglementation severed such function from the competitive activities dependent of the market power such enterprises could own.

Juridical type and attributes of the flux administrators vary from country to country. In practice, two energy types can be defined, function of how production relates to environment and type of resource used: conventional energy, based on fossil fuel consumption; and renewable energy: solar, aeolian, a.s.o.

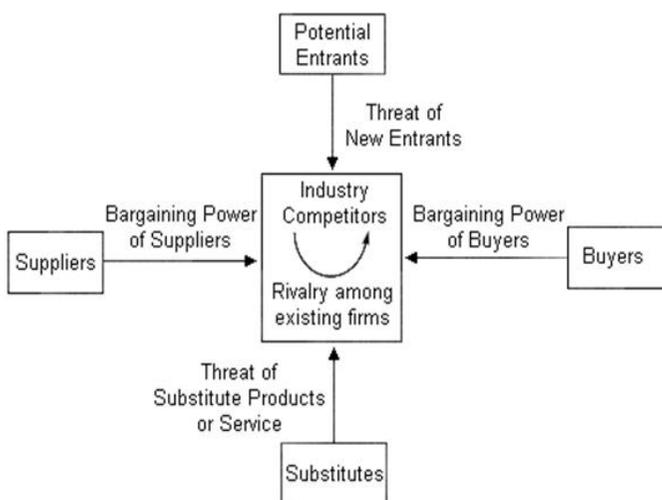
2.Prior Research and Approaches

Our topic is finding the key to social and economic development based on balanced natural capitals; as such, the topic falls under *sustainable development* header. Such concept, as approaching man-environment relation, implies integration of 3 factors: economy; society; and ecology. At its debut, the concept seemed a key to the ecology crisis generated by industrial exhaustion of resources. Later on, it expanded to cover aspects such as: justice,equity; life quality, social and economic life factors.

Practically, to economy basic principle – i.e. minimal effort deployed – one more, complementary, is added, i.e. meeting ecology natural requirements, asking man to prove his creativity and adaptability to such prerequisites.

Strategy means vision, vision is generated by past and also present state diagnosis, such states causing both strategy and vision. Scarcity of resources, competition, market limits, natural unbalance, all asked for ways out, not only from strategy or engineering researchers but also from famous SF writers, such as Frank Herbert in *Dune*, the first major SF ecology novel before the oil crisis of the'70s.

Michael Porter develops his 5 forces model (Fig.1.), meaning to cover actual market competition aspects.Three of Porter's five forces refer to competition from external sources. The remainders are internal threats. Porter referred to these forces as the micro environment. They consist of those forces close to a company that affect its ability to serve its customers and make a profit. A change in any of the forces normally, requires a business unit to re-assess the marketplace given the overall change in industry information.



(Fig.1) The Five Forces model of M.Porter, Source M.Porter, Strategie concurențială:București:Teora, 2001

The overall industry attractiveness does not imply that every firm in the industry will return the same profitability. Firms are able to apply their core competencies, business model or network to achieve a profit above the industry average

Writings focused on economic and strategic valence of renewable energy depended on prior research and development of technology.

A network industry is an activity organized around an infrastructure that assumes quite high fix costs related to variable costs.

Analyzing the competition on the energetic market and its specificity is important the concept of transactional costs introduced for the first time by Ronald Coase in his 1937 paper entitled "The Nature of the Firm. Afterwards Williamson in the neoinstitutionalist current shows that firms have interest when to internalize certain activities when to externalize them.

Alexandrina Duță, in her Advanced Macro-economics, approaches market limits as related to public goods and externalities: „As a rule, public goods are not totally subjected to specific market transactions. As such, market field is limited, while access to public goods is, at least in theory, limited. Game theory explains the rationale of market limits determining the specific market logic”. (1)

The network activities are generally assigned to some public services, however, unlike the pure public services their consumption is divisible. It can be observed a certain weakness of the market so that it can allow access to everyone at the network, is necessary the intervention of the national public or regional power. The existence of public service missions requires the presence of a regulator. This regulator watches over the respect of rights and liabilities of the concessionaire and makes sure that has an equal treatment towards certain users.

„The regulator's role is triple:

- 1.to protect the investor against a destructive competition, this is done through the adjustment of some exclusive rights to the concessionaire of the public service.
- 2.Protection of the user against the abuse of dominant position of the concessionaire(whatever monopol having a "natural" tendency of abusing the dominant position).
- 3.The saving of the collective interest, which requires taking under consideration of preoccupations regarding the national independence, the territory improvement, redistribution of income.”(10)

3. Research Methodology

The topic needs both static approach and dynamic analysis of competition. Present study stage covers the former of the two, implying an analytical approach of, firstly, the basics of *industry* and of *market structure*; and, secondly, of competition pressure, evidenced by Michael Porter's 5 forces model; power of each such 5 forces and interaction thereof if working together by morph the specific economic activity field as to competition intensity, which, ultimately, determines the field efficiency. The typical market of economic activity is the imperfect competition market.

The market's structure study implies the analysis of the following elements: degree of atomicity, of transparency, of product homogeneity, of freedom to freely enter and exit the market and also of the production factors mobility.

Through a qualitative approach of competitive intensity it shows that products substitutability is manifested as the consumer finds the opportunity of a similar usage. “Highly subjective by nature, the establishment of a characteristics list of the products and their performances helps thou to clarify if the products are substitutable or not, in particular examining if those performance characteristics are equivalent or comparable.”(7)

4. Research results

In the energy production field, although traditional energy and solar energy are generated by widely differing technology (i.e. based on fossil fuels the former, on photovoltaic effect the latter), the two are substitutable by filling the same need, i.e. consumption of energy.

Given that technological processes are run in various business fields, substitutable products industry is a type of competition more and more often encountered. The trend becomes more and more tempting of enterprises turning to such type expanding and diversifying. (6).

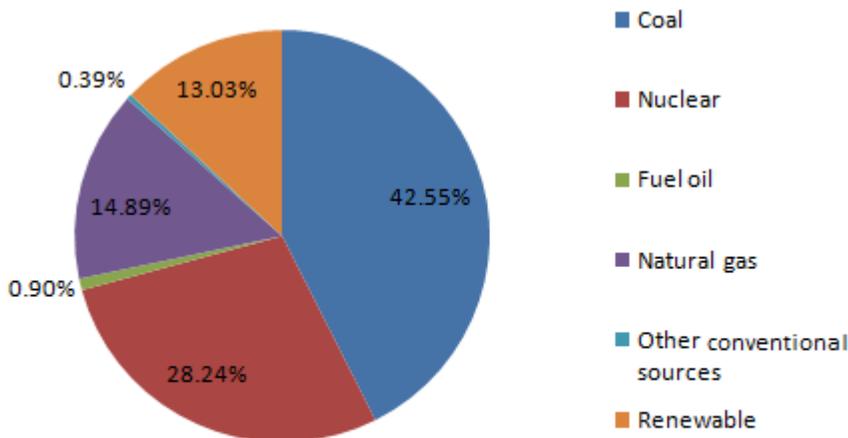
The future of, say, photovoltaic energy, depends on the innovating capacity of enterprises coming from silicon industry, i.e. different from fossil fuels. As, yet, expensive, scale economies can be a key-factor for the success of such enterprises.

The entry barriers in the energy sector are first of technical nature, this being the main factor in influencing the competitive game. Virtually choosing a substitute product in the energetic market is conditioned by the network's capacity to take care of the energy in its various points.

Apparently industries upstream of the energy industry get to have a higher negotiation power, due to the unbalance of ratio demand/supply. This relationship between demand schedules leads economists to classify goods as either substitutes or complements.

Practically three types of interlocking are manifest in Europe: physical, economic, and political.

"The numbers speak for themselves: almost 50% of the energy consumed in Europe is imported, and it is estimated that 20-30 years from now, Europe will be 90% depended regarding the oil, 70% regarding natural gas, and 100% regarding coal"(9). The physical dependence determines an economic dependence due to the dynamic of the traditionally resources prices which can create tensions and affect the world economy. The purchasing security develops a new dimension of the dependency, the political one generated by the resources asymmetric growth. The main electric energy supplier from Romania supplies in a low amount renewable energy (Graphic1), and this is mostly (99%) a hydro-energy.



Graphic1: Electric energy supplies by SC ENEL ENERGIE SA

Source: ENEL ENERGIE SA

The opportunity of a similar usage of a renewable energy with traditional energy conditions the substitutability degree. In fact the usage of renewable energy must be approached in two plans: a spatial plan founded on natural fluxes which are not present abundantly on the whole planet (the solar potential differs from one region to another), and a temporal plan which emphasizes the intermittent character of production and consumption of renewable energy. For example in the

case of solar energy the intermittence is generated by the lack of light during the night, Practically the two energies do not substitute one another completely but they coexist and their intercalary way of usage generate a complementarily degree of their own. In my opinion in the electric energy market manifests a sixth force "the force of complementary products".

5. Conclusions

Stimulation of the renewable energy industry develops like an integrative factor of competition policies with the environment protection strategies. Macroeconomic arguments pro are robust: on the one hand, the beneficial effect is manifest, of the energy resources' renewable nature; and on the other, as determined by competitiveness increasing through more and more inter/intra-industries competitiveness due to energy production being substitutable, therefore causing more and more economic agents to enter the energy market.

Beneficial effects manifest at both energy market and environment levels are multiple, a lavish research topic for both technology experts and for economists, who target common goals, such as: freeing captive consumers; increasing competition on the energy market; cutting on negative externalities of production by lowered CO₂ emission.

Substitutable producer goods would include: petroleum and natural gas (used for heating or electricity). A substitute good, in contrast to a complementary good, is a good with a positive cross elasticity of demand. The degree to which a good has a perfect substitute depends on how specifically the good is defined. The fact that one good is substitutable for another has immediate economic consequences: insofar as one good can be substituted for another, the demand for the two kinds of good will be bound together by the fact that customers can trade off one good for the other if it becomes advantageous to do so.

In particular the advantages of solar electric energy are multiple:

- The resource is available everywhere even if it is less in North than South
- The energy is renewable and clean: 1 m² of pickup avoids the annual emission of approximately 100 kg of CO₂
- The local production is decentralized: it is produced in the proximity of the consumption place, thus, avoiding network losses
- Absence of noise
- Not one part is in motion and the collectors resist at unfavorable climate conditions.

The renewable energy development may determine local economic development because in most of the cases renewable energy is based on proximity resources, a feature that justifies the use of the expression "decentralized energy. Use of the proximity resources involved in stripping some areas without access to electricity grid: for example islands in the Danube Delta, inaccessible mountain areas, outermost regions, etc.

Using renewable energy systems to store energy accumulated, can be an alternative to connecting the national network which makes the strategic point of view to consider substitute services). Basically, in this case the beneficiary has a dual role of energy within a closed network: a role of producer and consumer.

The high cost of connecting to a conventional network when the customer is away from mains power makes an investment in a single autonomous system to be viable in financial terms. It is found that renewable resources cannot substitute in any moment the traditional energy practically to serve constantly, the two sources must coexist. The introduction of the new renewable energies sources can be translated through the appearance of a sixth force which is exercised in the energetic market that emphasizes the complementary character of products and services.

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CURRENT ECONOMIC AND MEDICAL REFORMS IN THE ROMANIAN HEALTH CARE SYSTEM (1)

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The “issue” of health has always been, both in social reality and in academia and research, a sensitive topic considering the relationship each individual has with his own health and the health care system as a public policy. At public opinion levels and not only, health care is the most important sector demanding the outmost attention, considering that individual health is the fundamental prerequisite for well-being, happiness and a satisfying life. The ever present research and practical question is on the optimal financing of the health care system. Any answer to this question is also a political decision, reflecting the social-economic value of health for a particular country. The size of the resource pool and the criteria and methods for resource allocation are the central economic problems for any health system. This paper takes into consideration the limited resources of the national health care system (the rationalization of health services), the common methods of health financing, the specificity of health services market (the health market being highly asymmetric, with health professionals knowing most if not all of the relevant information, such as diagnosis, treatment options and costs and consumers fully dependent on the information provided in each case) and the performance of all hospitals in Romania, in order to assess the latest strategic decisions (introduction of co-payment and merging and reconversion of hospitals) taken within the Romanian health care system and their social and economic implications. The main finding show that, even though the intention of reforming and transforming the Romanian health care system into a more efficient one is obvious, the lack of economic and demographic analysis may results into greater discrepancies nationwide. This paper is aimed to renew the necessity of joint collaboration between the economic and medical field, since the relationship between health and economic development runs both ways. (This paper was co-financed by the European Social Fund through the Operational Programme of Human Resources Development 2007-2013, POSDRU/1.5/S/59184 „Performance and excellence in the economic science postdoctoral research in Romania” coordinated by the Bucharest Academy of Economic Studies; my postdoctoral research period lasts from Nov. 2010 to Mar. 2013)

Key words: health care system, rationalization, decentralization, co-payment, hospital mergers

JEL Classification: H 51, H 75, I 18

I. Introduction

The end of 1989 found Romania in a deep economic, social and obviously, sanitary crisis. The health of the population was quite poor, partly due to the lack of finance for the health services, of positive factors to motivate the staff and internal inefficiency of the system. **The political changes since December 1989** generated a replacement of the old structure – part of a totalitarian system – and in the health field the principles and organization of a socialist health system, such as Semaško. Physicians fought to introduce a new Bismarck model (**health insurance system**) and to develop the private sector or private practice in public services. Under the context of changes since December 1989, in terms of reforms, the health care system has set up the following goals: reconstitution of the legislative and organizational framework; introduction of the health insurance system; payment of services on the basis of the medical act efficiency and quality; facility of a better access to health services; improvement of medical

service quality; replacement of traditional medical service with ambulatory care, in terms of health care services; decentralization of the health system by increasing the role of the local authorities, financing institutions, communities. Frequent changes of government and ministers, the lack of clear strategy and defined objectives to be pursued rigorously and independently of political changes slowed down the health reform process after 1990; only after 1997, Romania adopted a social insurance health system. But the main strategic decision was the start of a process of management training for new executives appointed after the revolution, which had to manage crisis and lead change. The main difficulties in the early years of reform, not completely cleared until today, were the exact definition of the future roadmap, identifying priority issues specific to the whole system, as well as to each phase and area, inability of absorption of medical aid and financial management, serious shortcomings in communication science, negotiation and stimulation of all "actors" participation in the process of change.

II. Rationalization of the medical services

The analysis of countries with representative health care systems shows that there is a determined relation between the objectives of health systems, their structure and health policies. (Drăgoi 2010: 128). Basically, health policies that lead to a certain structure of the health system are affected and respond to the objectives that policy makers intend to achieve in terms of public health care. It is impossible to set up a sanitary policy and a health system that should ensure universal access for a large number of people, to high quality services and that should decrease costs at both macro-systemic and micro-systemic level. This can be translated through the impossibility of universality and equity regarding the access to welfare services and low costs. As a consequence to the mechanisms used when establishing the policies of allocating resources in the health system, one should highlight the fact that in all countries where the payment for the medical services is not made directly, **the phenomenon of medical services rationalization** appears (Klein 1993: 308). The configuration of a medical service package was regarded as an option of facing up the discrepancy between the available public resources and the related requirements.

In the national systems such as the one of Great Britain, the rationalization process was achieved by streamlining the implicit and less explicit mechanisms; doctors used to send to specialist services only certain patients, and in terms of specialized, ambulatory or hospital care, the issue itself was a matter of waiting lists. Following the reforms taking place in Britain, these decisions tend to be explicit, through negotiated contracts between health care providers and payers, establishing more clearly the number of patients that can be treated, the quality and the volume of services involved. The rationalization phenomenon is also present in health systems that are based on public or private health insurances. In such cases, rationalization has often been explicitly approached, detailed contracts between the insurance house and health care providers, which specify what services are covered by the insurance policy, including criteria under which those services to be rendered (quality, waiting time, additional costs etc.). When the right to medical services is not explicitly stated and the system is theoretically comprehensive, it is the buyers who decide (e.g. insurance funds) thus undermining equity of access. In situations where there is a defined package of health services, buyers are free to provide more benefits (services). This is quite rare in Central and Eastern European countries.

III. Decentralization of the health care systems

Decentralization of health services, considered a key concept in reforming health systems in many countries, including Romania, conceived and applied with responsibility, can be an effective means of stimulating local and individual initiative to facilitate a better resource allocation according to the health needs, leading through the community involvement, to a more

efficient decision-making process and a reduced inequity in health care. Decentralization should not be viewed as a saving solution to structural problems of a system as, at the same time, it should not be omitted its disadvantages (fragmentation and duplication of services, increased costs). Traditional forms of decentralization in health services were defined by analysis of the role of public administration, focusing on how a national political structure relates to the distribution of authority and responsibility for health services at the local level. The initial elements of decentralization were introduced in the early years of the new regime. Local Administration Act in 1992 sets a new decentralized government structure defining the organizational context in which the public health care system should operate.

According to the experts' opinion (Vlădescu 2004: 64), decentralization may envisage four major forms:

- **deconcentration** – refers to a partial transfer of central administration authority towards the local segment;
- **devolution** – involves the creation or strengthening of the autonomous sub-national administrative level, which should have greater independence from the national one, the authorities concerned being elected locally rather than appointed by the centre;
- **delegation** or **functional decentralization** – relies on the transfer of management responsibilities that belong to a number of well-defined positions, a specific organization, outside the central administrative structure, which is indirectly controlled by the late one;
- **privatization** – use a price system as a set of "signals" that consumers and producers can use to make decisions.

The study on the decentralization of health facilities and services as well as introduction of some elements of market economy has been experienced in Romania with World Bank support in four and then eight pilot counties. Strategies and objectives at the county level have been identified for the pilot, with emphasis on primary health services, performance and motivation of human resources, improving hospital management and integration, community involvement and strengthening the role of county health departments. Until the introduction of social health insurance system, decentralization of health care organization was limited by rigid hierarchical reporting system. So far, decentralization has manifested itself just as deconcentration. After entering the law on health insurance, delegation and privatization began to play an important role in the decentralization process. Thus, the National Health Insurance has taken over responsibility for revenue collection, allocation of resources considering the geographical areas, levels of care assistance and health care institutions. Under the new legislation, part of the Ministry of Health responsibilities has been delegated to the College of Physicians and Pharmacists respectively. These include rules on work, planning the number of medical staff (together with the Ministry of Health) and physician' representation towards the third party payer.

Given that the health care system in our country (but the phenomenon is present in many other countries) is not efficient enough in terms of both health care accessibility and quality of services, people look for alternative sources on the private market, privatization and competition occurring in response to these pressures. The so often invoked privatization, which some authors (Collins 1996 in Vlădescu 2004: 62) even contested as specific form of decentralization of health services, should not be regarded as an objective itself but rather as a means of achieving pre-set objectives. This has important implications in defining ways of introducing private health care practice, since the achievement of different types of objectives can lead to acceptance of certain modes of privatization at the expense of others. For example, co-payments may be brought to increase access to certain services, which are applied in excess, or to reduce the demand for them. Also, privatization may increase or reduce funding priority for the health sector. Essentially, privatization can be a means to a default goal, when you want to achieve a coherent strategy, and as a general rule, privatization that does not provide competition may be more harmful than no

privatization at all. And this is one reason why more and more countries choose the public/private mix against the total privatization.

IV. Current decisions in the Romanian medical system

IV.1. Co-payment

The allocation of financial resources requires a comprehensive and thorough planning process to balance the costs of various sectors of the health field and the adequate level of equity between regions and social groups. In this respect, the World Health Organization (<http://www.who.int>), focusing on efficient use of resources as vital element of health development, recommended preferential allocation of resources to primary and intermediate care services, particularly for health services coverage of social disadvantaged groups.

The financing methods of medical- sanitary assistance refer mainly to (Ashworth et al. 2005: 259-262): ***general fees*** – collected at the state budget and then distributed to the sanitary sector, in accordance with the approved budget; ***compulsory insurance*** – cover the entire population, regardless of the health status of those who pay; ***voluntary insurance (optional)*** – related to health or the insured person's illness risk; ***direct “out of pocket” payment*** – rarely in the western countries, usually as part of co-payment.

Co-payment was used in the *national health service model*, introduced in Great Britain by William Beveridge, who through the *Report of Social Insurance and Related Services* (1942) opened an opportunity of a wealthy state with an efficient national health service, and set medical assistance as one of the national political priorities (<http://www.nhs.uk>). The system has the general taxation as a funding source, which is controlled by public authority, as well as a budget; there is also the private sector. In this model, there is free access for all citizens, the coverage is general and administration is supplied by state authorities. Physicians are either employees or paid for the number of patients enrolled on their lists (capitation method), co-payment of a portion of the cost of some service being practiced to some extent (Dobson 1999: 19). Therefore, co-payment involves patient's contribution to the costs of health care assistance, which is co-participation. The argument is that using this method stimulates consumers not to use unnecessary medical services. Its opponents consider this method to affect disproportionately poor people and discourage preventive care.

From the perspective of classical economic theory, the individual is regarded as the best expert of its needs and, therefore, decides what to buy (consumer sovereignty). In healthcare, this means that the patient looks for health services based on price and quality, as anybody does when buying any other product. However, the medical services market does not work the same way as other markets, displaying certain specificity. As it is well known, only if the market functions properly, it becomes efficient and its customers have sufficient information to choose correctly, too. Market transactions are problematic because of **information asymmetry** between providers, consumers and health care financers. Information asymmetry is high: most doctors are informed (by the nature of their profession), which can thus induce the behavior of consumers (patients). The consumers of medical services find very difficult to be properly informed, mainly because of the high cost of information. Most often, they are unable to determine whether their symptoms are severe or do not know the type and form of therapy required, and generally, there is little information about the effectiveness of all existing treatments. Consequently, if the doctors and hospitals operate in a free market by seeking to maximize profits, is unlikely to lower price of health services due to competition. In a situation of tacit cooperation between physicians and hospitals, due to the setting of standard prices and the protection of their income, one can hardly speak of a fair competition. Even if the doctors would compete freely, it is unlikely that patients should be informed so as they may choose the best medical service quality and the lowest price. The question is whether or not all health services could be allocated through market mechanisms

just like any other goods or services. But there are a number of fundamental constraints (uncertainty about the anticipated medical needs, lack of complete information and patient ignorance, unfettered access to medical services determined by income, oligopolistic situation.), which, making it impossible to allocate all resources through free-market health, helps to shape context frame that makes health care market be typical example of **market failure**. The constraints that make a free market mechanism fail in the allocation of health resources do not stand for an argument that government intervention and free medical services offer would be the best alternative. Most often, the free market failure takes the form of government intervention which subsidizes the consumption of medical services, regulating the behavior of producers of medical services (doctors, hospitals) or imposes taxes on consumption, such as co-payment.

IV.2. Merged Hospitals

Ministry of Health has recently made public **the list of merged hospitals**, a process that is part of **the reorganization of the hospital system**. In accordance with the project implemented by the **Ministry of Health**, of the 435 **hospitals** with beds that currently exist, 182 units are proposed to remain unincorporated and to **get reorganized** as outer sections. Of 182 **hospitals**, a number of 111 **sanitary units** will be merged (<http://www.ms.ro/>. <http://www.sanatateatv.ro/stiri-medicale/spitale-comasate/>). This decision of the Ministry is based on arguments such as:

- profile change of certain hospital will lead to a more stable sanitary system;
- hospitals that are not able to meet certain conditions, finally will not benefit from the contract with the National Health Insurance House (prof. dr. V. Astărăstoae, <http://www.ziaruldeiasi.ro/local/comasarea-spitalelor-pro-si-contra-ni724q>), thus being excluded the reimbursement of the medical services belonging to some unprofitable units;
- merging process will cut health care system bureaucracy, considering that patients will be treated for different diseases within the same hospital;
- reduction of management positions – the hospitals that are merged are to have only one manager and a single administrative body.

But there are several arguments against that deserve to be taken into account. On one hand, opponents of mergers argue that the Health Ministry should not condition hospitals' classification and funding from this point of view. Starting from certain hospitals inefficiency argument put forward by policymakers in health care, based on National Center for Statistics and Public Health, I analyzed the performance of hospitals in Romania through the following parameters: average number of hospital beds, the average use rate, the rate of their optimum utilization and the resultant of the two or the demand or the surplus of beds in each of the 435 hospitals. Centralized data shows the following:

- within each county, (including Bucharest) there are both units recording a surplus of hospital beds (in relation to optimal utilization rate) and hospitals with beds deficit;
- nationally, totaling the excess of beds needed, the figures show that there is a surplus of hospital beds, according to table no. 1. In the light of these indicators, merger or readjustment of certain hospitals is justified, but a closer analysis shows that hospitals list for such restructuring do not fully comply with any economic considerations (merging a hospital with a surplus of beds with one with a deficit), not even the medical terms or merging hospitals to cover other necessities) and, not least, the context regarding patients or medical staff (which regards hospitals located in different places at considerable distance between them – for example, to get an approval from the manager of the hospital, the employee of the medical sector could be forced to go to another town).

Table no. 1 – Demand/surplus of beds in Romanian hospitals (the average of 2007-2009)

County	Demand/surplus of beds	County	Demand/surplus of beds	County	Demand/surplus of beds
Alba	59	Covasna	-208	Neamț	-24
Arad	-41	Dâmbovița	-216	Olt	-53
Argeș	-48	Dolj	-105	Prahova	-51
Bacău	-104	Galați	-164	Satu Mare	-178
Bihor	30	Giurgiu	-82	Sălaj	-224
Bistrița Năsăud	-281	Gorj	-10	Sibiu	-161
Botoșani	-68	Harghita	-346	Suceava	-359
Brașov	-111	Hunedoara	-279	Teleorman	-178
Brăila	-61	Ialomița	-55	Timiș	-445
Buzău	41	Iași	-46	Tulcea	-238
Caras-Severin	-146	Ifov	3	Vaslui	62
Călărași	-119	Maramureș	-235	Vâlcea	166
Cluj	-145	Mehedinți	-147	Vrancea	-99
Constanța	-173	Mureș	-277	București	514
Total			- 4602		

Note: sign „-” stands for a surplus of bed; sign „+” stands for a demand of beds

Source: achieved by author on the basis of data offered by the National Center of Statistics and Information in Public Health

V. Conclusions

If the picture of the past health care system has had rather a documentary value, the current and future image cannot be indifferent to us, especially since the transition has prolonged excessively, overlapping global crisis. The reasons for which the health reform, in Romania, has generated, at best, partial results are manifold, but they can be mainly summarized as follows:

- ignorance of tradition and evolution of public health concepts in Romania by physicians in general, and decision makers, in particular, seems to be the most serious deficiency, which adversely affected the cooperation with foreign experts;
- contradictions between the views of public health experts and their acquisition by public policymakers in implementing the reform;
- democratic deficit in health system planning (at the implementation of laws);
- excessive politicization of the health system, from the minister up in all health units;
- a general lack of public health managers in the ministry structure that does not change with each government or minister;
- absence of implementing the primary health care programs;
- inability to prioritize system as a major imperative in terms of transition to a market system with mechanisms different from the previous total and limited resources;
- excessive bureaucratization of business at the expense of medical care itself.

In this context, to accelerate the process of reforming the health system certain priorities should be established with utmost responsibility, that can be achieved with available resources and potential so as the primary health care programs may become reality. It is also necessary to reinvent the College of Physicians and Pharmacists functions to restore public respect for the doctor, not just through professional attire, but also by behavior and attitude (common sense, morality, decency, dignity). Another tool for optimization of the reform process is voluntary health insurance market (private insurance). The advantages of this type of medical insurance are designed to introduce elements of competition between health providers as well as the encouragement of loyalty towards employers. For the first time in Romania, voluntary health insurance creates a legal remedy that allows medical personal income growth in line with quality, value their work and its social importance, creating prerequisites for decreasing the "informal payments". Also, the relationship between health care providers in the budgetary network and insurance companies will induce greater discipline in the public system through indirect control that insurance companies exercise over the expenses incurred by their customers in this system.

As for the Romanian context, I consider that the experiences of certain European countries can be taken as a basis for developing an efficient health system. In addition to the national interest, it appears as a necessity in terms of European integration and “health globalization”.

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COMPARATIVE STUDY ON CORPORATE GOVERNANCE

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Corporate governance is a key element of today's economic reality being more and more present in many countries around the world. This paper has two main objectives. The first one is to offer more insight into the concept of corporate governance by a thorough literature review and by presenting and analyzing a framework of corporate governance. The second objective of this paper is to investigate the corporate governance situation in three developing economies (Romania, Bulgaria and Hungary). The World Bank and the European Bank for Reconstruction and Development published a series of reports on corporate governance. The present study uses data from these reports in order to illustrate how these developing economies are dealing with corporate governance. Based on ROSC Reports a corporate governance score was calculated. As this score shows, there is room for improvement for all three developing economies. This study is important because it shows the differences in corporate governance among developing economies and the need to study these nations at the individual country level. Corporate governance has many benefits for developing economies. It helps developing economies to register sustainable growth rates, to increase investors' confidence in the national economy, and to increase the ability of capital markets to mobilize savings.

Keywords: corporate governance, shareholders, stakeholders, investors, corporate governance principles.

JEL Classification: G30, M10

I. Introduction

Corporate governance has become an important topic in practice and academic literature in recent years. To ensure a competitive position, to attract capital, to ensure sustainability, and to combat corruption, companies from developing countries need to put in place good governance institutions.

According to Monks and Minow (2004) the importance of corporate governance has increased dramatically in 2002 when a series of events led to the bankruptcies of large U.S. companies and the loss of thousands of jobs. The way companies are governed determines their fate as well as that of the economy in general. Failure to attract adequate levels of capital threatens the existence of firms which can have serious consequences for the entire economy. Firms that are unable to attract capital may remain outside of international markets entirely, while economies may not benefit from globalization. The investors are interested in those companies with good corporate governance because, according to OECD (1999), Corporate governance specifies the distribution of rights and responsibilities among different participants in the company, such as managers, shareholders and other interested parties, specifying the rules and procedures for making decisions on company's affairs. In this way, it also provides the structure through which company's objectives are set, the means of attaining those objectives and monitoring performance. Thus deficiencies in corporate governance can have as a consequence not only scandals and corporate liquidations but also financial crises and economic instability.

The Center for International Private Enterprise (2002) listed some of the main advantages of a strong corporate governance. These include:

- improved access to capital and financial markets;
- higher accountability and transparency;
- stimulation of performance;
- protection of shareholders and their investment;
- reduces the incidence of corruption;
- enhancement of marketability of goods and services

The list illustrated above gives a general image of the most important benefits of a good corporate governance. For developing countries, the problem of good corporate governance development becomes more complicated because of the underdeveloped institutional infrastructure. For this reason there is a need for a careful approach to governance restructuring.

A weak or absent corporate governance can have the following consequences:

- reduces the opportunities to attract sufficient capital, limits competitiveness and job creation;
- has a negative impact on employees' commitment;
- may lead to bankruptcy due to a lack of solid company strategy and leadership from the board of directors;
- allows company managers and directors to follow their own interests at the expense of shareholders, creditors, and other stakeholders;
- excessive regulation that impacts private sector growth (CIPE, 2002).

II. Review of the literature

The literature on corporate governance is extremely broad. Only in recent years hundreds of articles and dozens of books have been oriented toward corporate governance.

The concept of corporate governance began to take shape more clearly after 1997, in the European Union, when most countries have adopted codes of corporate governance. The impulse of adopting these codes has been the financial scandals related to the failure of British companies quoted on the stock market. On the other hand, the Asian economic crisis of 1978 and the withdrawal of investors from Asia and Russia had created problems for the international business community regarding the consequences of the investors lack of trust in corporate management.

Corporate governance principles developed by the OECD (Organization for Economic Cooperation and Development) provide specific indications, meant to improve the legal regulations. They formulate practical proposals to the attention of stock market authorities, investors and other pillars that have intervened in the governance of the company. Adapting corporate governance principles for the purposes of ensuring transparency, accountability and fair treatment of shareholders has resulted in the development of the OECD Principles of Corporate Governance. The principles underlying corporate governance should ensure the strategic direction of the company.

The concept of corporate governance encountered many definitions. Depending on their perspective, different authors define this concept in different ways. Thus corporate governance definitions can be grouped in two categories: narrow and broad definitions. These two categories are illustrated below.

In a narrow sense, corporate governance can be defined as the relationship among various participants in determining the direction and performance of corporations. The primary participants are (1) the shareholders, (2) the management, and (3) the board of directors (Monks and Minow, 2004).

A broader definition was given by Cadbury Committee, 1992. Thus corporate governance was defined as the system by which companies are directed and controlled.

An even broader definition belongs to Zingales (1998). According to this author, corporate governance is the complex set of constraints that shape the ex post bargaining over the quasi rents generated by the firm.

Many researchers consider that the corporate governance mechanisms fall into one of the two groups: those internal and those external to the firm. This aspect is illustrated in figure 1 which depicts the separation of ownership and control.

On the left side, figure one illustrates the internal governance and on the right hand side the external governance. The Board of Directors is charged with advertising and monitoring management and has the responsibility to hire, fire and compensate senior management team (Jensen, 1993).

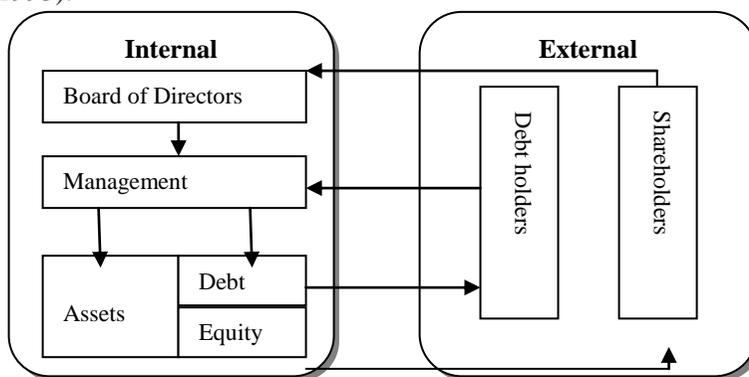


Figure 1. Separation of ownership and control – balance sheet model.

Source: Adapted from Gillan, S. (2006): 382.

In conclusion we can say that there is no exact definition of corporate governance, not even in developed countries. All are based on the theory of interest holders. Interpretations of corporate governance refer to a set of relationships, distribution rights, set of rules, sector of the economy.

III. Corporate governance framework

If we closer analyze Figure 1 we can see that firms are more than board, managers, debt holders and shareholders. A more detailed framework of corporate governance is depicted in Figure 2. This is an expansion of the previous figure in order to examine a broader set of governance influence. As in Figure 1, the corporate governance framework is divided into two broad classifications: Internal and External Governance.

At the center of this system as an internal force, is the board of directors which is considered by many as the lynchpin of corporate governance (Gillan, 2006). Its overriding responsibility is to ensure the long-term viability of the firm and to provide oversight of management. In many countries the board is responsible for approving the company’s major decisions and strategy and for hiring, monitoring and replacing the management (World Bank, 1999).

A large amount of research on corporate boards was concentrated on the relationship between board structure and firm value (Vafeas, 1999). Others were concentrated on the analysis of the structure and activity of board subcommittees (Klein, 2002; Deli and Gillian, 2000).

More recent studies focus on changes of board structure over time. Here we can mention the study conducted by Coles at al. (2005) who focused on board changes over time and on the costs associated with board changes resulting from the new regulations.

Other empirical studies were focused on board characteristics. According to Ferris et al. (2003) busy boards don’t have a negative impact on the shareholders’ wealth and Larcker et al. (2005) found that “cozy” board relationships limit effective monitoring.

The composition of the board of directors also shows strong contrasts between countries. For example, Japanese companies are known for the large number of board members and therefore their inefficiency. These can consist of more than 50 members with few external ones to monitor the management activity and the strategic direction of the company. Italy and France are considered to have medium-sized boards but still inefficient due to the lack or reduced number of independent non-executive directors. The most active boards are the ones in Great Britain and the United States due in part to the efforts in improving corporate law.

As previously stated the framework includes internal and external forces that face one another and have an impact on the activity of the existing corporations. The external forces are represented by policy, legal, regulatory and market. The role of the external forces is to strengthen the internal mechanisms for corporate governance.

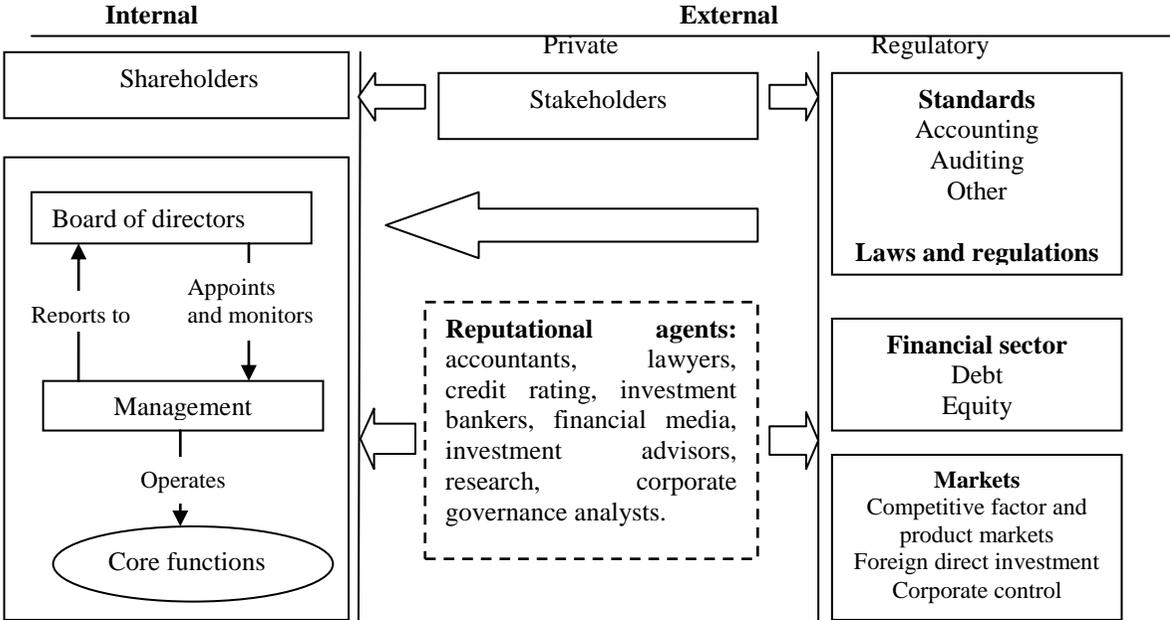


Figure 2. Corporate governance framework.

Source: Adapted from World Bank, Corporate Governance: Framework for Implementation, Overview, 1999: 4.

Many authors and analysts consider that the problem of corporate governance has become increasingly important for developing countries. The challenge for these countries is to adapt systems of corporate governance to their own corporate structures and implementation capacities, in order to create a culture of enforcement and compliance.

IV. Research methodology

The object of this section is to provide some insight on the corporate governance situation in three developing economies: Romania, Hungary and Bulgaria. In order to analyze the development of corporate governance in these counties we used secondary data analysis, more specifically reports or statistics offered by: European Corporate Governance Institute (ECGI), World Bank Reports (ROSC Reports), European Bank for Reconstruction and Development (EBRD) reports.

V. Data analysis – Country comparison

Table 1 illustrates, for all three analyzed countries, the overall ease of doing business rank (out of 183 economies) and the ranking for protecting investors. As we can see Hungary has the highest index of all three countries with an increase in 2011 of 6 points compared to 2010. Romania is the second one followed by Bulgaria. We should mention here that of all three analyzed countries Romania was the only one which went down two places in the overall ranking regarding the ease of doing business.

We chose to illustrate the investor protection index because we consider it to be very relevant to our study. The Investor Protection Index consists of three dimensions of investor protection: transparency of transactions (Disclosure Index), liability for self-dealing (Director Liability Index) and shareholders' ability to sue officers and directors for misconduct (Shareholder Suits Index). Thus, as the above table shows the situation in Romania and Bulgaria (both ranked 44 with an absolute value of 6) is far better compared to the one registered in Hungary (which ranked 120 with an absolute value of 4.3).

Table 1. Ease of doing business ranking

	Romania	Hungary	Bulgaria
Ease of doing business-rank	56(-2)	46(+6)	51(0)
Protecting investors-rank	44	120	44
-disclosure index	9	2	10
-director liability index	5	4	1
-shareholder suits index	4	7	7
-investor protection index	6	4.3	6

Source: own compilation, based on Doing Business Report, 2011

Table 2 illustrates the existence of a national code for corporate governance and the degree of compliance of CG legislation with the OECD principles of corporate governance.

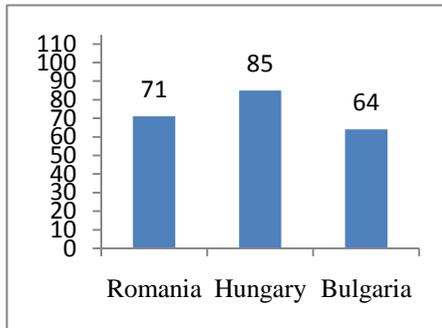
Table 2. Corporate Governance assessment

Country	Corporate governance (CG) code	Compliance of CG legislation with the OECD Principles of Corporate Governance.
Romania	The Bucharest Stock Exchange has issued a voluntary Corporate Governance Code for the companies traded on the regulated market of the Bucharest Stock Exchange, 2008	Low-compliance
Hungary	The Budapest Stock Exchange non-binding guide on corporate governance (Corporate Governance Recommendations), 2008	High-compliance
Bulgaria	Bulgarian National Code For Corporate Governance, voluntary, 2007	Medium-compliance

Source: own compilation based on EBRD Report 2004, 2007; ECGI Index of Codes

All the Codes mentioned in Table 2 are meant to contribute to raising national corporate governance standards and practices by adding voluntary requirements to the national framework's statutory provisions.

Figure 3 shows the score for the observance of various corporate governance practices. The score was calculated from the ROSC reports (2002, 2004) on a 1-5 Likert scale (5-Observed, 4-Largely observed, 3-Partially observed, 2-Materially not observed, 1- Not observed). If a country registered the highest score for all OECD Principles, it's corporate governance score would be 115 (5x25 principles). The lowest score would be 23 (1x23).



As Figure 3 shows none of the three countries had a perfect score. The highest score was registered by Hungary (85) followed by Romania (71). Bulgaria was the last one with a score of 64. As this data shows, for all three countries there is room for improvement.

Figure 3. Corporate governance score.

Source: Own calculations based on World Bank-ROSC reports.

V. Conclusion

This study illustrates the corporate governance situation in three developing nations: Romania, Hungary and Bulgaria. Even if Hungary registered the highest level of compliance of corporate governance legislation with OECD principles and the highest corporate governance score, key deficiencies still remains. For instance Hungary has to solve the problem of protecting investors because a key determinant of a nation wealth is investors' confidence.

Bulgaria ranked last based on the corporate governance score, but regarding the compliance with OECD principles the situation is better than the one reported for Romania, Bulgaria being the only country who has a National Code for Corporate Governance. Also a number of 53 companies reported to have a full comply with the principles of the National Corporate Governance Code (Bulgarian Stock Exchange).

In Romania some progress can be observed in the development of corporate governance in such as in January 2009, when the Bucharest Stock Exchange published an updated Corporate Governance Code, which is required for all listed companies on a "comply or explain" basis. Even so, in Romania there are discrepancies between the written law and the implementation of the law regarding the enforcement of the corporate governance framework. Thus this is a situation that has to be addressed in the future.

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COMPETITIVENESS AND PERFORMANCE ON THE COSMETICS MARKET

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Most organizations are going through massive changes. Their customers are changing, their competition is changing, their customer's needs are changing and their resources availability is changing - the cosmetics companies are no different. Organizational survival and success depends on the ability of the managers to detect and adapt to critical changes in the environment, which may impact the company.

The paper has two main purposes. First to underline the importance performance measurement has in today's business and second to present a few key elements regarding the performance of the cosmetics sector in Romania. For this we have tried to answer the following question: Are the cosmetics companies competitive?

This paper is based on exploratory literature review of different approaches regarding organizational performances in organizations in general.

Despite the global economic crisis and the general slowdown of many markets, the Romanian beauty and personal care market continued to grow in 2009. Consumer awareness and product knowledge is growing rapidly and the development of retailing chains and their widening product offer have also helped to further the development of the beauty and personal care market.

The paper also presents the results of section three of an online survey conducted at 10 cosmetic companies from Romania. The results have shown that multinationals have both the economic and managerial power to succeed in obtaining their goals. Even though the sample of 72 respondents was rather small, we managed to conclude from the received answers that the majority of companies focus on economic and managerial performance rather than on social and ecological performance indicators.

This paper aimed to contribute to the literature review development in the field of performance management. The results of this study can be of use for managers from the analyzed domain or for other researchers in the economic field.

The authors have contributed to the originality of this paper, by presenting pertinent conclusions about the cosmetics market from Romania, resulted from the literature review and from an empirical study.

Key words: management, performance, cosmetics market, competition

JEL Code: M10, L25, L66

1. Introduction

It is amazing to look back at the different changes that management has gone through in the past 20 years. But even with all the so-called management trends that were supposed to "solve" all the problems of management, there are two things that have remained constant (Rieley 2006: 123)

- 1) Managing an organization to high performance is not easy.
- 2) There are a small number of organizations that are able to consistently demonstrate high performance over time.

The senior managers of companies that are able to sustain consistent performance growth over time seem to have a clear understanding that everything that has to do with organizational performance is interrelated, and being able to command an understanding of those relationship can be significant differentiator in business today.

The question that arises for most managers must be “*how can I improve performance in my business?*”

The paper offers an interesting perspective, both theoretical and practical, on overall organizational performance with special focus on economic, managerial, social and ecological performances, analyzing the cosmetics industry in Romania.

2. The concept of organizational performance

Organizational performance refers to the ability of the organization to achieve its objectives.

Management organization should be guided by one objective, for example maximizing the value of equity, or several objectives that may not necessarily involve maximizing actions. Examples of such objectives could be to maintain or increase employment, environmental protection, increase customer satisfaction, etc.

The question that arises is: “What measures should be oriented towards this type of objectives?”

To answer this question it is necessary to have clear and measurable targets because:

- Assessing the individual and department is objective, this being based on individual contribution to overall goals.
- Having a clearly defined purpose, people are more motivated, focused efforts and resources are directed towards achieving the goal.
- Monitoring and evaluation is made easier and more equitable because the focus moves from the man on the result.
- Enabling more effective management control is to intervene only when the parameters set are not met.
- Allows a clearer communication and better understanding of management expectations.
- If you understand, at management level, that “you get what you measure” such a system becomes a way of empowerment of employees.
- Role ambiguity disappears. Everybody knows what to do, what results are expected and the resources available.
- A systematic approach to assess how it affects all of its components changes.
- Measuring performance against established standards allow early action when results are not expected.
- Move the focus on customer needs.
- Engaging in a cycle of continuous improvement is the basis of a performance.

2. Categories of organizational performance

Organizational performance can be divided in several categories: economic performance, managerial, social and environmental, technical and technological, financial, etc.

Economic performance is a consequence of the provision of an efficient management and aims to achieve at high levels, with targets, the results measurable by volume and efficiency indicators. The purpose is to obtain the lowest production cost for the best quality possible (as a combination of both). Economic performance aims to obtain the highest possible income (total income, turnover or net income - from the work). Economic performance and profitability is expressed best by the rate of return (the benefit of capital).

Managerial performance refers to adapting to the needs of the organization in general and not least, the cultural conditions (in particular the organization and operating area). Managerial performance is all about decision making. How and why decisions are made. How they are implemented and communicated. Managers need ongoing training in how to think differently to understand the challenges they and the organization face; how to influence employees, peers, as well as suppliers and customers to help the company successfully address these challenges.

Social performance refers to the customers' needs and their purchasing power by providing products / services of technically good at a reasonable price. The organization shall provide satisfactory wage jobs and a favorable climate within.

The technical performance refers to the efficient use of available resources in the organization and is measured primarily by productivity. Increased technical performance is influenced by increased productivity and a better organization of production.

In conclusion, increased organizational performance can be achieved by increasing the efficiency and effectiveness.

3. Cosmetics market study

An overview of the broad cosmetics industry made by Global Insight, in the EU, Japan, China, and the U.S. reveals that Europe's market size is almost as large as the U.S. and Japan combined, due to its large population.

Data revealed by Euromonitor International showed (Table no. 1) that U.S. cosmetics market was €38.2 billion, while Japan's was €23.7 billion and China's €8.2 billion. The total EU 27 cosmetics market was valued at €63.5 billion. Among the EU countries, Germany has the largest cosmetics market, valued at €11.7 billion, followed by France (€10.4 billion), the U.K. (€10 billion), Italy (€8.8 billion), and Spain (€7.4 billion).

Table 1: Market Sizes - Historic - Retail Value RSP - Current Prices

Categories	Zone	2004	2005	2006	2007	2008	2009
Beauty and Personal Care - US\$							
mn - Year-on-Year Exchange Rates	Eastern Europe	14902.5	17387.2	19986.1	24080.5	28192.4	22935.7
Beauty and Personal Care - RON	Romania	2105.1	2480.7	2863.1	3192.2	3536.7	3737.1

Source: Euromonitor International

As could be expected in a vast region with different tradition and cultures such as the EU, unique trends in buying patterns may be found in particular countries, as well as some common trends across the board.

From country to country, spending on cosmetics varies by product. The French primarily purchase skin care products while Germans and the British spend mostly on toiletries. The Nordic countries, Finland, Norway, and Sweden spend a much lower share of their consumption basket on fragrances, compared to the EU average, while Spain and Portugal spend lower-than-average shares on decorative cosmetics.

3.1 Nature of competition

Currently, large cosmetic corporations combine to control over half of the cosmetics market. The tables below lists each of the top 10 companies in 2001-2009 and their respective shares of the global cosmetics market (retail sales value).

Table 2: Company Shares (by Global Brand Owner) - Retail Value RSP - %

Companies	2001	2002	2003	2004	2005	2006	2007	2008	2009
Procter & Gamble Co, The	7.3	7.3	8.4	8.4	12.1	12.1	12.1	11.9	11.7
L'Oréal Groupe	8.4	8.8	9.3	9.5	9.5	10	10.2	10.4	10.1
Unilever Group	7.3	7.2	7.2	7.1	6.7	6.6	6.7	6.6	6.8
Colgate-Palmolive Co	3.8	3.7	3.6	3.6	3.7	3.7	3.7	3.7	3.6
Avon Products Inc	2.9	2.9	2.9	3.1	3.2	3.2	3.3	3.3	3.4
Beiersdorf AG	2.4	2.6	2.8	2.9	2.9	3	3.2	3.3	3.3
Estée Lauder Cos Inc	3.8	3.7	3.7	3.6	3.5	3.4	3.3	3.2	3.1
Johnson & Johnson Inc	2.1	2.2	2.2	2.2	2.2	2.9	2.9	2.9	2.9
Shiseido Co Ltd	2.8	2.7	2.7	2.7	2.6	2.4	2.3	2.3	2.5
Kao Corp	1.6	1.5	1.5	1.5	1.5	2.3	2.1	2.1	2.2

Source: Euromonitor International

Holding a position as one of the top 10 manufacturers is enviable, however, these companies understand that they must constantly reconsider and re-evaluate their market positions by listening to the demands of their customers, gaining footholds in new markets, and evaluating their organizational structures. These large multinational firms are finding themselves facing stiff competition from other popular brands. Other cosmetics companies are pushing ahead, trying to gain their own place in the market, and have largely been successful in developing their own name.

The industry's key players pursued a strong acquisition strategy in recent years. The purpose of this strategy was to introduce new business lines, streamline production, and expand the types of products under company control. Over the next few years, the success of these acquisitions will have to be evaluated as the relentless demand for the consumer's loyalty will surely continue.

The great majority of the products sold in Romania are produced and distributed by multinational chains, such as L'Oréal or Beiersdorf as shown in table no 3. The economic crisis of the last two years of the review period helped local producers be noticed on the market, as they offer cheaper products characterized by a good price/quality ratio. Local company, Farmec took over smaller local producers and their brands and expanded its market share, but still remained behind the multinationals. Although company advertising budgets decreased in 2009, the sums invested by multinationals in media advertising increased the visibility of their products and made an important difference in their sales levels.

The situation is not likely to change in the first few years of the forecast period, given that the multinationals have the ability to adjust rapidly and efficiently to the changing requirements of the market, unlike their Romanian counterparts. The strongest Romanian player on the beauty and personal care market is Farmec. However, even with its latest investments in new production technologies and in promotional activities, it cannot overthrow the established hierarchy.

This does not mean the demise of Romanian manufacturers, but rather new development trends. These trends will take the form of mergers or takeovers as well as reorientation towards export and more easily accessible markets. Players will also have to adjust to those requirements which do not demand a huge financial investment but which can bring considerable benefits.

Table 3: Company Shares (by Global Brand Owner) - Retail Value RSP - %

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Beauty and Personal Care Romania									
Avon Products Inc	7.2	11	13.2	15	15.2	14.1	13.3	12.7	12.3
Procter & Gamble Co, The	6.5	6.7	8.1	8.3	10.2	9.8	10.5	10.4	10.5
L'Oréal Groupe	4.1	4.5	5.2	6.1	6.6	7.6	8.1	8.5	8.7
Beiersdorf AG	4.5	5	5.9	6.5	7	7.8	8.1	8.1	8.3
Unilever Group	6	5.6	5.2	5.1	5	5.1	5	4.8	4.9
Colgate-Palmolive Co	7.9	7.5	6.8	5.9	5.3	5	4.8	4.7	4.7
Oriflame Cosmetics SA	4.4	5	5.8	6.4	4.6	5	4.7	5	3.9
Henkel AG & Co KGaA	5.8	5.5	4.8	4.1	3.8	3.7	3.7	3.6	3.7
Coty Inc	3.2	3.2	3	2.9	3.2	3.5	3.5	3.4	3.4
Sarantis SA, Group	2.1	2	2	2	2.9	2.9	2.8	3.2	3.3
Farmec SA	4.5	4.2	3.9	3.6	3.3	3.2	3.1	3.2	3.2

Source: Euromonitor International

4. Organizational performance in the cosmetics industry

In order to determine what are the best performance indicators used in the cosmetics companies the authors developed a questionnaire (Grigore, 2010), which was applied on 10 cosmetics companies from Romania: Procter & Gamble, L'Oreal, Avon, Oriflame, Farmec, Beiersdorf, Unilever, Colgate-Palmolive, Elmi Prodfarm LLC and Genmar Cosmetics. The results presented in this paper are part of a bigger on-going research. For the main research, we built a questionnaire aimed at identifying specific management practices inside Romanian organizations with special emphasis on those which have as main activity the production and sale of cosmetics. About 90% of the participants who answered the questionnaire were mostly mid-level and low-level managers. The questionnaire consisted of 40 questions grouped into ten sections. Section three had as purpose identifying key elements for strategies and organizational performances.

The existence of a development strategy revealed that the organization have inclination for strategic planning. Because of the trend towards long-term policy actions and financial projections made trimistrial, strategy helps establish a unified direction for the organization in terms of its operational goals and provides the basis for allocating resources to guide the organization towards achieving these objectives. In this respect, the development objectives of an organization implement a set of performance indicators. 70% of respondents working in the organization, acknowledged the existence of a development strategy, among them a similar percentage saying that the strategy has objectives related to organizational performance.

In an attempt to define the concept of performance we noticed that, in spite of uses, it becomes a multivocal word. Many of the respondents defined the performance thinking how it can be measured. In general knowledge, organizational performance measurement is seen as a further evaluation of the results. Therefore we came to one conclusion, performance has to be measured, for example it can be described by a set of indicators with a degree of complexity more or less elevated. Particular emphasis is given to economic and management performance indicators, over 50% of respondents stating they use a measurement system for these types of indicators.

The variety of indicators for performance measurement shows that they differ depending on the information received by managers are on each hierarchical level and depending on their interests. Thus, higher level managers are focused on their company's overall performance and mid-level managers perceive performance and lower profitability through the department or team working. The respondents gave some examples of organizational performance used in their organization: profit, productivity, revenue, reducing the amount of non-compliant products manufactured from 3% to 2%, reducing the time spent honoring orders from 30 days to 20 days, indicators measuring the number of products/services sold in a period, the number of customers attracted, gross margin, carbon footprint, etc

5. Conclusions

A number of EU countries have developed a large trade surplus and a significant comparative advantage in cosmetics products. This is clear evidence that cosmetics manufacturers in these countries have, over the years, identified the most important consumer trends and have responded with new product offerings that have been successful. These companies have accomplished this task in both domestic and export markets. In the process, these companies have successfully developed strong brand recognition in a highly competitive and dynamic market place. In conclusion, based on the results presented in this paper, we believe that most of the multinational have managed to be competitive on the Romanian market.

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MANAGEMENT MATERIAL COSTS ELEMENTS

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The paper presents the main elements of the analysis of the dynamics and structure of the material costs. Also, there are presented the principal indicators for tracking and analyzing the Physical Consumption of Materials (PCM). The factorial analysis's elements of the costs with materials per products there are presented too. The modification of the sales price and the modification of the costs with materials per product unit there are also presented. Economical use of the material resources used represents the principal factor of economic growth, an important element of the efficiency of any industrial enterprise. In the category of material costs we take into account both the costs regarding the consumption of labor objects (base materials, raw materials, fuel, energy, auxiliary materials) and those reflecting the equivalent of consuming fixed funds. For characterizing the status of material resources use, we need a system of indicators which allows the following of the objectives execution. The system of indicators which refers to the metal consumption illustrates a widely used and complex resource. Some of these system indicators can also be used for any material resource. In the category of material costs we take into account both the costs regarding the consumption of labor objects (base materials, raw materials, fuel, energy, auxiliary materials) and those reflecting the equivalent of consuming fixed funds. The analysis of the metal consumption per specific unit (CSM) implies comparisons with the specific consumptions for the products sol in the previous periods and for similar products in the industry.

Keywords: Management; Physical Consumption of Materials; Material Costs

JEL Clasificasion: E23, L10, L11.

1.INTRODUCTION

Economical use of the material resources used represents the principal factor of economic growth, an important element of the efficiency of any industrial enterprise.

The main issues that will be examined during the analysis of the material costs are (Ioana 2007a, 2006):

- The analysis of the costs with materials.
- The analysis of the dynamics and structure of the material costs.

In the category of material costs we take into account both the costs regarding the consumption of labor objects (base materials, raw materials, fuel, energy, auxiliary materials) and those reflecting the equivalent of consuming fixed funds (Ioana 2007b, 2008a).

2.INDICATORS FOR TRACKING AND ANALYZING THE PHYSICAL CONSUMPTION OF MATERIALS (PCM)

For characterizing the status of material resources use, we need a system of indicators which allows the following of the objectives execution (Ioana and Nicolae, 2002).

The principal indicators for tracking and analyzing the physical consumption of materials (PCM) are presented below. It will illustrate a system of indicators which refers to the metal consumption as a widely used and complex resource. Some of these system indicators can also be used for any material resource (Ioana 2008b, 1998).

- A. The specific consumption (C_s) per product unit (the level of specific consumption).
The model of this indicator is:

$$C_s = C_T / Q \quad (1)$$

Respectively:

$$I_{CS} = C_{S1} / C_{S0} \quad (2)$$

Where:

C_T – represents the total consumption per product;

Q – is the physical volume of the product;

I_{CS} – is the indicator of the specific consumption;

C_{S0} – represents the basis of comparison.

The indicator of the specific consumption can be presented less than one of the situations:

$$\text{➤ } I_{CS} < 1 \quad (3)$$

$$\text{➤ } I_{CS} = 1 \quad (4)$$

$$\text{➤ } I_{CS} > 1 \quad (5)$$

$I_{CS} < 1$ indicates the reduction of the specific consumption, compared to the planned one or to the one corresponding to a previous period.

$I_{CS} = 1$ indicates the placement at the normal level or at the previous level.

$I_{CS} > 1$ indicates the exceeding of the specific consumption, having negative impact on the compact activity.

- B. The metal consumption per specific unit (consumption per functional characteristics).

The model of the metal consumption per specific unit (C_{SM}) indicator is:

$$C_{SM} = C_T / N_s \quad (6)$$

Where:

N_s represents the numbers of specific product units (the dimension of the characteristic, eg: horse power; cubic meters etc).

3.CONCLUSIONS

The system of indicators which refers to the metal consumption illustrates a widely used and complex resource. Some of these system indicators can also be used for any material resource.

The analysis of the metal consumption per specific unit (C_{SM}) implies comparisons with the specific consumptions for the products sol in the previous periods and for similar products in the industry.

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INTRINSIC AND EXTRINSIC MOTIVATION. AN INVESTIGATION OF PERFORMANCE CORRELATION ON STUDENTS

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A series of research undertaken in the last decade have revealed some interesting aspects regarding the effects of different types of motivation on performance. Among the researchers who have shown interest in this field we can number: Richard Ryan, Edward Deci, Sam Glucksberg, Dan Ariely, Robert Eisenhower, Linda Shanock, analysts from London School of Economics, and others. Their findings suggest that extrinsic incentives may have a negative impact on overall performance, but a general agreement in this respect has not been reached.

In this paper we intend to shed some light upon the relationship between intrinsic and extrinsic motivation and performance. Experts define intrinsic motivation as being the execution of a task or activity because of the inherent satisfaction arising from it rather than due to some separate outcome. In contrast with intrinsic motivation, we speak of extrinsic motivation whenever an activity is done in order to attain some separable outcome.

With the purpose of contributing to the clarification of the links between concepts, we initiated and conducted an explanatory research. The research is based on the analysis of the relations between the results obtained by third year students and their predominant type of motivation. For this, we formulated and tested four work hypotheses using a combination of quantitative methods (investigation) and qualitative methods (focus group). After the validation of the questionnaires, the respondents were divided into four categories: intrinsically motivated, extrinsically motivated, both intrinsically and extrinsically motivated and unmotivated. To analyze the collected data, we made use of Excel and SPSS.

Some of the primary conclusions of the research are as follows: as the average increases, the percent of individuals having both extrinsic and intrinsic motivation is decreasing; the highest percentage of unmotivated students is concentrated in the highest average category; Female students tend to have better performance at university level. The research intends to be nearly a first step in the attempt to clarify the relationship between intrinsic (and extrinsic) motivation and performance. Further research is needed.

Keywords: intrinsic motivation, extrinsic motivation, performance, correlation.

JEL: M12, I23

I. Introduction

The concept of motivation has emerged around 1930 and it was long debated and studied in an attempt to identify what drives people to undertake a particular action. After decades of studies and research it can not be said that there is a unified theory of motivation. However, some characteristics of motivation are generally accepted.

A series of research undertaken in the last decade have revealed some interesting aspects regarding the effects of different types of motivation on performance. Among the researchers who have shown interest in this field we can number: Richard Ryan, Edward Deci, Sam Glucksberg, renowned economist Dan Ariely (together with his colleagues from Carnegie Mellon and the University of Chicago), analysts from London School of Economics, Robert Eisenhower, Linda Shanock and others (Pink: 2009). Their findings suggest that extrinsic incentives may have a

negative impact on overall performance, but a general agreement in this respect has not been reached. Although there is no clear answer yet on the effect of extrinsic incentives on creativity or in regards to the implications of intrinsic motivation on performance, many companies are building a new conception based on autonomy, mastery and purpose (Matei and Abrudan: 2010, 1137-1139).

In this paper we intend to shed some light upon the relationship between motivation and performance. With this purpose, we initiated and conducted an explanatory research. The research is based on the analysis of the relations between the results (performance) obtained by third year students and their predominant type of motivation (intrinsic and extrinsic motivation).

II. Intrinsic and extrinsic motivation - defining the concepts

When an individual is motivated, he feels energized or inspired to act, whereas an unmotivated person feels no impetus to do so (Ryan and Deci: 2000, 54). Thus, it is clear that people have different amounts of motivation. In addition, human motivation can vary not only in level, but also in orientation and type of motivation. Some of the contemporary researches are based precisely on these peculiarities of motivation and intrinsic versus extrinsic motivation has never been more debated.

Intrinsic motivation is defined as being the execution of a task or activity because of the inherent satisfaction arising from it rather than due to some separate outcome. Intrinsic motivation reflects the natural propensity of people toward learning and assimilation. Despite this, theorists (Ryan and Deci: 2000, 56) have shown that this propensity appears to be expressed *only under specifiable conditions*.

In contrast with intrinsic motivation, we speak of *extrinsic motivation* whenever an activity is done in order to attain some separable outcome (Ryan and Deci: 2000, 60).

Experts Ryan and Deci (Ryan and Deci: 2000, 58) state that extrinsic rewards can decrease intrinsic motivation. Rewards linked to the completion of a task, threats, deadlines and directives undermine intrinsic motivation because individuals perceive them as behaviour control techniques. On the other hand, free choice and the opportunity for self-direction can increase intrinsic motivation because of the sense of autonomy linked to them. Yet, even extrinsic motivation can have a certain amount of autonomy. The degree of autonomy varies in extrinsic motivation and it can be a reflection of either external control or true self-regulation (Ryan and Deci: 2000, 59).

III. Research methodology

In conducting the research, we considered the following work hypotheses:

- Individuals for whom the intrinsic motivation is prevailing have higher averages than those for whom extrinsic motivation is prevailing.
- Individuals having both extrinsic and intrinsic motivation are better performers than individuals with only one active type of motivation.
- Unmotivated individuals have the lowest averages.
- Intrinsic motivation is present in significant different proportions in women than in men.

To test the work hypothesis an explanatory research has been conducted. For this, quantitative methods were combined with qualitative methods so as to achieve the most significant results. Thus, we associated the investigation – which was the primary method of research – with the focus group to attain suggestions for data interpretation.

Within the investigation, a questionnaire was used as research tool. The questionnaire - which was adapted from that of Horst H. Siewert and Renate Siewert (Siewert H.H, Siewert R., 2000) – contains 31 closed questions and it is designed to measure extrinsic and intrinsic motivation. The

questionnaire was applied to 37 third year Management students from The Faculty of Economics. Of the 37 questionnaires, 35 were validated and 2 were not taken into account.

To facilitate the interpretation of data collected, we organized three focus groups. The grouping of participants was based upon the results of the questionnaire, as follows:

- The first focus group gathered individuals with both extrinsic and intrinsic motivation (16 students);
- The second focus group brought together individuals with either intrinsic or extrinsic prevailing motivation (12 students);
- Unmotivated individuals participated in the third focus group (7 students).

IV. Research findings

The sample consisted of 37 third year students who took part in the first phase of the research: the questionnaire. Subsequently, 35 questionnaires have been declared valid. Of these respondents, 37,1% were men and 62,9% women. The results of the questionnaire can be summarized as follows:

- 45,8% of respondents have both extrinsic and intrinsic motivation prevailing;
- 17,1% of respondents are intrinsically motivated;
- 17,1% of respondents are extrinsically motivated;
- 20% of respondents are unmotivated (neither extrinsic nor intrinsic motivation prevailing).

To analyze the relations between the prevailing type of motivation and performance we considered the average of each student for the first two years of university studies. The averages were divided into three categories so as to be roughly equal proportion:

- the first category: averages between 5 and 6,5;
- the second category: averages between 6,5 and 7,5;
- the third category: averages higher than 7,5.

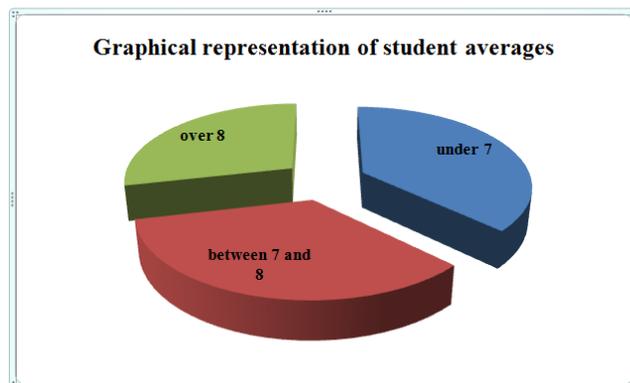


Exhibit 1. Graphical representation of student averages

Source: own research

Further, we made use of the Crosstabulation function available in the SPSS software in order to get an idea on the possible relationships between motivation and averages (Exhibit 2). This reveals the following conclusions:

- 46,2% of students with averages lower than 6,5 have both extrinsic and intrinsic motivation prevailing; 23,1% of them are intrinsically motivated, while 15,4% are extrinsically motivated and 15,4% are unmotivated;

- 58,3% of students with averages between 6,5 and 7,5 are extrinsically, as well as intrinsically, motivated; only 8% are just intrinsically motivated, while equal proportions of 16,7% are extrinsically motivated, respectively unmotivated;

- in the case of students with the highest average (over 7,5), a percentage of 30 are both extrinsically and intrinsically motivated, 20% are just extrinsically motivated, for 20% intrinsic motivation is prevailing, and the remaining 20% are unmotivated.

Average_1 * Motivation Crosstabulation

			Motivation				Total
			Neither EM nor IM	Just EM	Just IM	EM and IM	
Average_1 between 5 and 6,5	Count		2	2	3	6	13
	% within Average_1		15,4%	15,4%	23,1%	46,2%	100,0%
	% within Motivation		28,6%	33,3%	50,0%	37,5%	37,1%
	% of Total		5,7%	5,7%	8,6%	17,1%	37,1%
between 6,5 and 7,5	Count		2	2	1	7	12
	% within Average_1		16,7%	16,7%	8,3%	58,3%	100,0%
	% within Motivation		28,6%	33,3%	16,7%	43,8%	34,3%
	% of Total		5,7%	5,7%	2,9%	20,0%	34,3%
over 7,5	Count		3	2	2	3	10
	% within Average_1		30,0%	20,0%	20,0%	30,0%	100,0%
	% within Motivation		42,9%	33,3%	33,3%	18,8%	28,6%
	% of Total		8,6%	5,7%	5,7%	8,6%	28,6%
Total	Count		7	6	6	16	35
	% within Average_1		20,0%	17,1%	17,1%	45,7%	100,0%
	% within Motivation		100,0%	100,0%	100,0%	100,0%	100,0%
	% of Total		20,0%	17,1%	17,1%	45,7%	100,0%

Exhibit 2. Crosstabulation between averages and the types of motivation prevailing

Source: own research

The findings are not encouraging as three of the work hypotheses are, evidently, not verified. Moreover, apparently as the average increases the percent of individuals having both extrinsic and intrinsic motivation is decreasing. Furthermore, it is worth mentioning that the highest percentage of unmotivated students (30%) is concentrated in the highest average category. Concluding, it seems *there is no correlation* between the two variables considered. The correlation coefficient is presented in Exhibit 3. The small value of the correlation coefficient (0,139) suggests *there is no significant relationship between motivation and performance* (average).

	Average	Motivation
Average	1	
Motivation	0,1397454	1

Exhibit 3. Correlation between average and motivation

Source: own research

The first three hypotheses are not verified. Further, we focused on the forth hypothesis, which is: Intrinsic motivation is present in significant different proportions in women than in men. To verify this, we applied a Crosstabulation analyze on average and gender variables, we calculated Chi-Square and the correlation coefficient. The findings can be summarized as follows:

- The majority of students with the average lower than 7,5 are men (60%). 92,3% of male students fall into the category with the lowest average.

- 93,3% of the students with the highest average are women. 63,6% of female students are situated in the highest average category.

Average * Gender Crosstabulation

		Gender		Total
		Male	Female	
Average Under 7,5	Count	12	8	20
	% within Media	60,0%	40,0%	100,0%
	% within Gen	92,3%	36,4%	57,1%
Over 7,5	Count	1	14	15
	% within Media	6,7%	93,3%	100,0%
	% within Gen	7,7%	63,6%	42,9%
Total	Count	13	22	35
	% within Media	37,1%	62,9%	100,0%
	% within Gen	100,0%	100,0%	100,0%

Exhibit 4. Crosstabulation between averages and gender

Source: own research

Based on these observations, as well as on the results of the Chi-Square Tests (Exhibit 4) and on the correlation coefficient calculated (Exhibit 5), we can state that *there exists a correlation between the two variables.*

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	10,443 ^a	1	,001		
Continuity Correction ^b	8,283	1	,004		
Likelihood Ratio	11,911	1	,001		
Fisher's Exact Test				,002	,001
Linear-by-Linear Association	10,145	1	,001		
N of Valid Cases	35				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5,57.

b. Computed only for a 2x2 table

Exhibit 5. Chi-Square Tests: Average and gender

Source: own research

Thus, female students tend to have better performance at university level.

	Average	Gender
Average	1	
Gender	0,403640948	1

Exhibit 6. Correlation: Average and gender

Source: own research

In regards to the relationship between gender and motivation there are no significant differences between male students and female students. Yet, the percentage of men who are intrinsically motivated is higher than that of women.

V. Conclusions

In order to draw the conclusions of the research conducted, we revisit the work hypotheses:

- Individuals for whom the intrinsic motivation is prevailing have higher averages than those for whom extrinsic motivation is prevailing. *Not verified.* There are equal percentages of intrinsically

motivated students and extrinsically motivated students in the highest average category. Research at this level can not state that there is a correlation between intrinsic motivation and better performance.

- Individuals having both extrinsic and intrinsic motivation are better performers than individuals with only one active type of motivation. *Not verified*. It appears that, as the average increases, the percent of individuals having both extrinsic and intrinsic motivation is decreasing. Further research is needed.

- Unmotivated individuals have the lowest averages. *Not verified*. For the sample analyzed, the highest percentage of unmotivated students is concentrated in the highest average category.

- Intrinsic motivation is present in significant different proportions in women than in men. *Verified*. Female students tend to have better performance at university level.

The research conducted has, of course, limitations. The most important aspect worth mentioning is that there is no statistical representativeness for the population investigated. The research intends to be nearly a first step in the attempt to clarify the relationship between intrinsic (and extrinsic) motivation and performance.

VI. Acknowledgments

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HUMAN RESOURCE MANAGEMENT - THE ROLE AND IMPORTANCE OF MULTINATIONAL COMPANIES

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If one of the factors of growth and economic development in the contemporary period is "human capital" in the analysis of human resources correlations between specialization and volume of information that can materialize evolution of human society, manifested in the last decades of the twentieth century and the beginning of the new millennium, outlines the prospect of an increasingly integrated world, which finds its origins in the experience accumulated by mankind over the processes and phenomena with economic, social and cultural. It was thus concluded that the individual is more than a mere component of productive factors and human resource management than rigid principles of asset management company, should take into account a number of features that are beyond economic calculation. Only taking into account all aspects that define the human personality, abilities, acknowledge, aspirations, temperament and character traits, resource management may be able to lead the precious, the only resource equipped with the ability to know and overcome their limits.

Globalization, European companies/multinational, human development, economic diversity, social, political and cultural-specific regions or countries are factors that have a major impact on human resources management. European human resource management is very complex. No other region in the world encompassing so many differences in terms of historical, cultural and linguistic aspects as well as Europe.

Each country has its own employment system, its laws and institutions, its own education system and a strong individualized managerial culture. Human resource management becomes the main instrument through which companies can provide competitive advantage in the intensification of globalization. In experts opinion, the main cause of European companies failure is the lack of understanding of key differences in human resource management in different countries. Companies must ensure their competitive advantage and deliver value added in terms of achieving a single market share.

Keywords: human resource management, human resources, multinational companies, human resource globalization

JEL Classification: F23, O15

1. Introduction

In the '90s, we witnessed to the human resources concept enlargement, employee and correlated with openness to the outside company. The proliferation of communication channels lead to a simple observation: the companies have realized that the real resource is the human capital value. Companies are forced to find profitable and loyal employees with high potential. Information technology is an intelligent manner to identify each employee's expectations based on a detailed and specific knowledge of each. Good human capital management allows not only lower management costs of personnel, but also increase individual profitability. The ultimate objective must be the center position of the employee's business strategy and integration in all the traditional functions of human resource management.

Multinational companies have implemented the idea of making contact with the employee as a personalized contact, organizations must adapt to each situation created - only in this way the

relationship between employee and employer becomes truly profitable. Similarly, the demand for human resources management solutions in particular still comes from multinational companies who imported the management culture of the groups they belong to.

Multinationals now play an important role in the economies of all countries in international economic relations, a topic becoming increasingly important for governments. Foreign direct investment, firms can also bring substantial benefits to both countries of origin and host countries through contributions to the efficient use of capital, technology and human resources between countries and can thus play an important role in promoting economic and social welfare.

But multinational enterprises, and organizing their operations beyond the national framework may lead to abuses by the concentration of economic power and to conflicts with national policy objectives. Moreover, the complexity of the multinationals and the difficulty of clear understandings on their diverse structures, operations and policies sometimes lead to concern.

Thus, the target is shared by all countries to encourage positive contributions which multinational firms can achieve economic and social progress and to minimize or resolve difficulties which may arise from carrying out their operations.

2. Human Resources Management

The term "human resource management" began to be used in the past fifteen years. Before, they used the term "personnel management", which became a stand-alone department in 1920 and was largely concerned with technical aspects of employment, evaluation, training and motivation courses. In late 1970, U.S. organizations have begun to be affected by factors such as globalization and rapid changes in technological level. Under their influence, firms began to be concerned with strategic planning, forecasting a change process in business.

In human resource management strategies are formulated and implemented in the medium and long term, thus contributing to human resource managers to key business objectives. The concept of human resources is not new. Peter Drucker, in his book "The Practice of Management, attributed management three functions: to obtain economic performance, leadership and management operators and managers work. "Man is the only resource available to man that can be developed," he says, and "people must think that people ... together managers and workers is an organization's human resources." Individual, structure, feeling, thinking, culture, motivations, desires and, in particular, self-awareness is a big unknown system, which can prevent or, conversely, the potency of an action, process, activity. By its nature a social being, man is taught to live and to work collectively as part of some group that feels more or less attached groups, in turn, interact with other groups, depending on one and exerting influence on others. Therefore, the successful initiation can conduct to various activities in an organization depending on the extent of motivated and coordinated human factor.

Human resources constitute the creative, active, and coordinating element in the work of the organization, influencing the efficacy critical material, financial and international aspects. It is necessary to describe people as "resources" to emphasize the importance and to show that their management requires high levels of sincere concern for people, care and professionalism. Emphasizing the role of human resources does not mean, however, an understatement of other resources.

3. Multinational companies. Origins and Evolution

Multinational companies, are the most powerful forces and play an important role in these actual conditions for the deepening of globalization pressure, their business taking place in a dynamic, turbulent space, at certain times or areas in the world's economy.

A national or transnational company is a company that engages in foreign direct investment and owns and controls the value-added activities in more than one country.

In general, we use "transnational" and "multinational" with the same meaning. The first term was adopted by the United Nations Centre for Transnational Corporations in 1974 at the request of several Latin American countries who wanted to distinguish between companies domiciled in a Latin American country could invest in another country, for those who and originate outside the region. The second term is preferred by developed countries, the business and academic community.

Over time, methodological differences have disappeared, so now both terms designate the same thing. However, there are differences between the two terms on the level of analysis. For example, in academia, the term "transnational" is used to designate "a multinational corporation that pursues a strategy of full integration and multi-dimensional organization." In another design, using terms that have the same meaning and believing that it refers to the same phenomenon, the only difference is that "transnational company" is a term used after 1980, and "multinational company" is a term used before 1980. There are academics who argue that there is one major difference between the two terms.

Among them is Carl Dassbach giving separate definitions for two terms. Thus, a multinational company is a company primarily focused on the different national markets or regions. It is characterized by a decentralized management (national or regional units are largely autonomous from the center of the main decision-making), a variety of production lines (each national or regional market oriented) and one division of work overlapped super flux activities as each unit operates independently of the others. On the other hand, a transnational company is a market-oriented world, or at least to an external market covering several countries or regions. The administration is far more centralized than for multinational company, your main office with a more direct control over units. Furthermore, a transnational company is moving towards creating a single enterprise with a single division of labor by eliminating redundant activities and focus activities in those countries (regions, markets) that offer the greatest benefits in the activity.

To assess the degree and size of multinational companies to take into account the following criteria:

- number and size of foreign subsidiaries or associated companies which it owns or controls;
- number of countries in which they engage in gainful activities;
- proportion of global assets and revenues or the number of employees for foreign subsidiaries;
- degree of internationalization of the management, ownership and high value activities.

Multinational firm's distinctive features are:

- profit organization and coordination of many activities beyond national borders;
- internalization of external markets for intermediate production that arises from these activities.

No other institution combines the two activities: production and trading abroad. A multinational company may be privately or publicly, may come from a country or a socialist market economy, may be motivated by private or social objectives, may have a large network in many countries or a single product in a single foreign country, the property can be owned and controlled by persons / institutions in one country (Mars, Tateng) national and international owned and controlled (Ford, Sony, Samsung), or internationally owned and controlled (Agfa, Royal Dutch Shell). Arriving at a stage of maturity, multinational companies have taken a number of features:

- turnover of many multinational excess even GNP of developed countries such as Portugal or Greece;
- can get loans on terms more favorable than many governments;
- adopt a centralized management and decentralization issues are vital to other activities, a strategy called "integrated management";
- vitality and dynamism: grow, expand, absorb, multiply, continuously expanding their scope of business, technology and capital migrate, the activity is diversified;

- combines the diversification benefits of scale;
- a "modular production", standard components are assembled into finished products differentiated by the characteristics of each target market.

4. Multinational companies and human resource management

It is widely theorized notion that, in terms of purpose, business exists to promote human welfare, and yet people are active participants in this activity as scientists, engineers, managers, administrators, sales staff and workers. And the work of multinational firms has contradictory effects on the international division of labor: improve the human resources at home and on the perspective of the host country, depending on the nature of the production process introduced by the company multinational labor skill level may be lower or higher. Other multinational companies even create their new specific benefits by recruiting a large number of unskilled or low skilled workers from one country and transporting them to engage in another. A multinational firm also affects international working conditions and wages: firstly, given that experience large and multinational information they hold on compensation of employees, labor and personnel management practices in different parts of the world, a multinational company is able to implement best practices to stimulate and motivate employees and increase productivity in all its branches (branches are usually transferred to the methods adopted in the country of origin). Secondly, the management of a multinational has a higher power and flexibility in negotiating with trade unions and governments work practices, conditions of employment and human resource development in countries that have branches than indigenous firms. A third point would be the relationship between multinationals and host country governments, in many cases, approaches to labor problems the two countries may be different methods and laws because they have accepted.

It is also worth mentioning that the effect it has multinational activity as promoters of foreign direct investment, the indirect employment of labor, which depends on the size of the product's output of foreign affiliates, their ability to source intermediate goods from local suppliers and how to choose a technology designed according to characteristics of the subsidiary and suppliers. Besides these effects on the vertical effects can be recorded the horizontally ones among local businesses as a result of competition with multinational subsidiary and global expenses incurred by the subsidiary's employees.

The countries multinationals also lead a policy of training and raising the qualification of human resources, although some are tempted to pay salaries comparable to local businesses, many international companies granted a similar level are higher, working conditions as compared to local standards are much higher, leading an aggressive recruitment policy, and identified two cases of people hiring highly qualified and trained personnel or younger and less experienced to be then "polished" .

For the home country in this plan, there are four consequences:

- effects of export incentives, where the subsidiary is supplying raw materials, intermediate goods, capital, finished products and services from parent companies or from home, creating new employment opportunities;
- employment effect for the parent company headquarters, as the subsidiary grows, innovation will increase, collateral management and other activities, is generally carried out by the parent, will generate new jobs;
- employment effect of firms 'support' of business subsidiaries, is actually an indirect employment (accounting firms, consulting, engineering, banks, etc..)

Human resource management becomes the main instrument through which companies can provide competitive advantage in the intensification of globalization. The experts, opinions about the main cause of European companies failure is the lack of understanding of key differences in

human resource management in different countries. Companies must ensure their competitive advantage and deliver value added in terms of achieving a single market shares. One of the most important requirements of the internationalization of business organizations is the training of managers in terms of culture, to knowledge, application and administration of cultural elements, specific country or region in which the company does. According to Geert Hofstede, HR practices should reflect the cultural specificity of each country, companies must recognize that different kinds of people should be valued using different standards, and exploit the ability to understand foreigners using their standards. Specific cultural context of each country exerts a major influence on human resource practices in that country. In many situations, the rule that is valid in one culture may not be applicable in another.

For example, in Japan, young managers are taught that overtime work compensated for golf parties that should play with or participation with customers in a karaoke contest held in a bar, are not always voluntary activities which they participate. The purpose of such actions is to develop team spirit, on the one hand, and understand the needs and mindset of the people in a relaxed, on the other side. Japanese companies in France have faced resistance from the employees supported the French when they tried to implement the spirit *bonenkai* parties, held on Christmas Eve. In place of such social events, the French preferred bonuses and bonuses paid during the Christmas holidays, and being willing to organize such events at home rather than at work. Such an attitude can be justified by the behavior of the French individualist.

American model of management values, performance, free enterprise and autonomy, are quite difficult to apply in Japan or European countries like France, Spain, Italy, Belgium or the countries of Central and Eastern Europe, due to differences between the culture of these countries and the U.S. U.S. is highlighted by a strong emphasis on pragmatism and profit maximization, organizational efficiency and productivity. In the U.S., hiring and dismissals are made as needed, management by objectives is the main method of assessing performance, management focuses on the idea of career mobility of employees at a large number of organizations, rewards are given based on performance work, and the relationship between unions and managers is an antagonistic nature.

The main values of Japanese culture are equity group, commitment, personal relations, work discipline, status, conflicts, and totally different from those promoted by the culture of western countries like USA, UK, France, where wealth, individualism, mobility power, authority and conflict resolution are the main cultural values. Compared to the U.S. human resource management, and Japan is characterized by long-term commitment to employees, employee involvement in the management of companies, promoting and rewarding based on the principle of seniority, and relations between unions and managers are dominated an attitude geared towards cooperation.

According to some experts, the European management is characterized by a lack of national identity management across Europe, compared with U.S. and Japanese management models. Changes in the European area are more complex than in the U.S. and Japan. Enlargement of the European Union to the south-eastern Europe, has generate a series of mutations in the economically, socially and politically field. Another dominant feature of European management is the need to develop new forms of work organization and enhance flexibility in business organizations in order to use the diversity and complexity of cultural, social, political, economic, to achieve competitive advantage. The European model of human resource management is characterized by a high diversity of economic, social, political and cultural property reflect the size, organizational, national and international corporate activity. Unlike the American model, is characterized by a high level of organizational responsibility and managerial support to employees and unions. Compared with the U.S., regulations on hiring and firing employees, education and licensing process to formalize training programs, reward system, the conclusion

and execution of individual contracts of employment is one of the main factors that define the application of human resource management in Europe.

Specific multicultural context of the European continent produces a number of major differences in the human resource practices, not only from one country to another, but even in the same country. For example, in Sweden, their application is used as a simple administrative tool, while in Britain it is mainly used as a tool for selecting candidates. Moreover, in Britain, the usual name of the form of employment is for employers Employer's application form, while the term is used in academic standard application form. In Luxembourg, a job interview is a more formal, while in Germany and the United Kingdom is well structured and the answers to the questions should be accurate and very clearly stated, leaving no room for interpretation. In Italy, a job interview is of a relaxed, free and informal. There are some differences between European countries in terms of selection criteria. If your skills and personality in Greece are the main criteria for selecting individuals in Germany and Britain put an emphasis on technical expertise and their previous work experience.

EU enlargement is the premise of increasing demands of work and living conditions across the continent. Very different rules on working and living conditions existing in the European Union for Romanian managers are very serious challenges that will have to align. Managers from EU are the main promoters of the concept of European career, career on EU is a direct consequence of the process of Europeanization. European Career management becomes an extremely important process, the emergence and development being favorably influenced the increasing population mobility in the European Union and multinational companies expanding operations in Europe.

The tendency in some companies from European Union countries is to secure European expertise through employees who have international experience and exhibit opening.

Evolution of human resource functions in Europe can be highlighted by current trends and future human resource management in Europe, for example:

- upgrading of human resources functions;
- training of human resources managers;
- "personalized" human resources management;
- adaptability and flexibility of human resource functions;
- mobilization of human resources;
- development of computerization and information resources.

ANEXA

***Tabel 1. FDI inflows in the top
10 host countries in Central and Eastern Europe in 1998 and 1999 (million dollars)***

CONTRY	1998	1999
Total ECE	21 149	22 923
Poland	6 365	7 500
Czech Republic	2 720	5 108
Russia	2 761	2 861
Hungary	2 036	1 944
Croatia	893	1 382
Romania	2 031	961
Bulgaria	537	770
Ukraine	743	496
Lithuania	926	486
Latvia	357	366

(Source: UNCTAD, database FDI/TNC)

TABEL 2. GEOGRAPHICAL SOURCES OF FDI INFLOWS IN CEE COUNTRIES IN 1999 (PERCENT)

Germany	18
USA	16
Holland	12
Others, unspecified	11
Austria	7
Other UE countrys	13
France	6
UK	6
Italy	4
Cyprus	4
ECE countrys	3

(Source: UNCTAD, database FDI/TNC)

Tabel 3. Top multinational companies that have home in CEE countries in order of assets held, in 1999 (in millions of USD assets and sales, assets, sales and operations employees are reported only performed abroad)

FMN Employees	Country	Industry	Active	Sales
1. Latvian Shipping Co.. 1631	Lithuania	Transport	493	214
2. Hrvatska Elektroprivreda d.d. N / A	Croatia	Utilities	363	0.2
3. Podravka Group 501	Croatia	Food	286	119
4. Gorenje Group 607	Slovenia	Appliances	256	642
5. Motokov a.s. 576	Czech Republic	Trade	164	260
6. Atlantska Plovidba d.d. N / A	Croatia	Transport	152	47
7. Weed Group 1616	Croatia	Pharmaceutical	142	334
8. Skoda Plzen Group 1073	Czech Republic	Diversified	139	151
9. Adria Airways d.d. N / A	Slovenia	Transport	129	98
10.MOL Plc. 628	Hungary	Oil and Gas	128	203

(Source: UNCTAD/Erasmus University database.)

Tabel 4. Top 25 countries of origin of FMN with the CEE countries of origin

Country	1998	1999
Slovenia	4	5
Croatia	4	4
Hungary	6	4
Czech Republic	3	3
Poland	3	3
Slovakia	2	2
Romania	1	1
Republic of Moldova	1	1
Lithuania	-	1
Latvia	1	1
Total	25	25

(Source: studiul UNCTAD asupra celor mai importante FMN din ECE)

Tabel 5. Industries operating in the largest 25 firms in CEE multinational (number of firms)

Industry	1998	1999
Transportation	5	5
Pharmaceutical and chemical	3	5
Petrol and mining	4	4
Food	2	2
Metallurgical	2	2
Machines and equipments	2	2
Other	3	2
Trading	3	2
Constructions	1	1
Services	1	1
Total	25	25

(Source: UNCTAD study on the most important CEE FMN)

**Tabel 6 Indicators of FDI and international production
(billions of dollars and percentages)**

	<i>Valoare în miliarde USD</i>			<i>Rata de creștere anuală</i>				
	1982	1990	1999	1986-1990	1991-1995	1996-1999	1998	1999
Incomes ISD	58	209	865	24.0	20.0	31.9	43.5	27.5
Outcomes ISD	37	245	800	27.6	15.7	27.0	45.6	16.4
Incomes stock ISD	594	1 761	4 772	18.2	9.4	16.2	20.1	18.8
Outcomes stock ISD	567	1 716	4 759	20.5	10.7	14.5	17.6	17.1
Fusions and Procurement	..	151	720	26.4	23.3	46.9	74.4	35.4
Sales of foreign affiliates	2 462	5 503	13 564	15.8	10.4	11.5	21.6	17.8
Total assets of foreign subsidiaries	1 886	5 706	17 680	18.0	13.7	16.5	21.2	19.8
Exports of foreign affiliates	637	1 165	3 167	13.2	13.9	12.7	13.8	17.9
Employees in foreign affiliates (thousands)	17 433	23 605	40 536	5.6	5.0	8.3	11.4	11.9

(Source: UNCTAD, *World Investment Report 2000: Foreign Direct Investment and the Challenge of Development*, figura I.13, p. 27.)

**Table 7. The 25 largest multinational companies in Central and Eastern Europe, ranked by assets held
(millions of dollars and number of employees)**

Nr.	FMN	Country	Industry	Capital		Sales		Employees	
				foreign	total	foreign	total	foreign	total
1	Latvian Shipping Co.	Lithuania	Transport	399.0	505.0	201.0	214.0	1 631	2 275
2	Podravka Group	Croatia	Food / Pharmaceutical	285.9	477.1	119.4	390.2	501	6 898
3	Gorenje Group	Slovenia	Appliances	256.4	645.9	642.2	1 143.3	607	6 717
4	Motokov a.s.	Czech Republic	Trade	163.6	262.5	260.2	349.1	576	1 000
5	Atlantska Plovidba, d.d.	Croatia	Transport	152.0	167.0	47.0d	47.0	-	528
6	Pliva Group	Croatia	Pharmaceutics	142.1	855.1	334.3	463.0	1 616	6 680
7	Skoda Group Plzen	Czech Republic	Diversified	139.1	973.4	150.7	1 244.5	1 073	19 830
8	Adria Airways d.d.	Slovenia	Transport	129.4	143.7	97.7	97.7	-	585
9	MOL Hungarian Oil & Gas Plc.	Hungary	Oil and natural gas	128.3	2 881.6	203.4	2 958.1	628	20 140
10	VSZ a.s. Kosice	Slovakia	Metallurgical	72.0	1 445.0	0.2	876.0	58	26 719
11	Petrol, d.d.	Slovenia	Oil and natural gas	70.6	634.2	112.4	706.0	10	3 349
12	Malev Hungarian Airlines Ltd.	Hungary	Transport	64.5	148.1	236.5	314.9	48	3 396
13	Matador j.s.c.	Slovakia	Arts	51.9	304.9	34.0	203.4	5	3 878
14	KGHM Polska Miedz S.A.	Poland	Mining	34.7	1 419.8	694.3	1 047.8	20	19 968
15	TVK Ltd.	Hungary	Chemical	33.0	543.0	133.0	401.0	181	6 099
16	Graphisoft	Hungary	IT	28.0	50.0	25.0	25.0	188	188
17	Croatia Airlines	Croatia	Transport	27.6	211.4	9.8	121.2	40	846
18	Elektrim S.A.	Poland	Commerce and various	21.0	1 228.0	42.0	874.0	62	26 475
19	Pilsner Urquell, a.s.	Czech Republic	Food	20.0	251.0	16.0	253.0	356	2 918
20	Moldova Steel Works	Republic of Moldova	Metallurgical	19.9	335.9	1.0	15.6	5	4 562
21	Budimex Capital Group	Poland	Construction	17.8	153.9	55.8d	316.4	644	1 095
22	Petrom SA National Oil Co.	Poland	Oil and natural gas	17.0	3 790.0	128.0	2 700.0	140	88 350
23	Iskraemeco, d.d.	Romania	Electric Cars	15.0	92.0	21.0	114.0	150	2 300
24	Lifosa j.b.c.	Slovenia	Chemical	13.2	55.2	93.1	100.0	-	1 339
25	Krka, d.d.	Lithuania Slovenia	Pharmaceutics	12.5	490.4	82.1	300.3	375	3 253

(Source: UNCTAD, *World Investment Report 2000: Foreign Direct Investment and the Challenge of Development*, figura I.15, p. 35.)

**Table 8. The 25 largest multinational companies in developing countries, ranked by assets held
(millions of dollars and number of employees)**

Nr.	FMN	Country	Industry	Capital		Sales		Employees	
				foreign	total	foreign	total	foreign	total
1	Daewoo Corporation	Korea Republic	Diversified	10 532	22 946	7 295	18 802	11 403	14 471
2	Petroleos de Venezuela S.A.	Venezuela	Oil	9 007	47 148	32 502	34 801	11 849	56 592
3	Jardine Matheson Holdings Limited c	Hong Kong, China	Diversified	6 652	11 970	7 983	11 522	..	175 000
4	First Pacific Company Limited	Hong Kong, China	Diversified	6 295	11 386	7 416	8 308	40 400	51 270
5	Cemex, S.A.	Mexico	Construction	5 627	10 231	2 235	3 788	10 690	19 174
6	Hutchison Whampoa, Limited	Hong Kong, China	Diversified	4 978	15 086	1 899	5 754	17 013	37 100
7	Sappi Limited	South Africa	Diversified	3 830	4 953	2 419	3 557	9 492	23 458
8	China State Construction Engineering Corporation	China	Construction	3 730	7 230	1 530	5 420	5 496	258 195
9	China National Chemicals Import and Export Corporation	China	Diversified	3 460	5 810	11 240	17 880	0 625	8 905
10	LG Electronics Incorporated	Korea Republic	Electronics and elec	3 158	15 431	5 175	17 640	32 532	80 370
11	YPF Sociedad Anonima	Argentina	trical	3 061	12 761	0 911	6 144	1 908	10 002
12	Petroleo Brasileiro S.A. - Petrobras	Brazil	Oil	.	34 233	.	27 946	.	41 173
13	Sunkyong Group	Korea Republic	Oil	2 561	24 572	9 960	31 692	2 600	32 169
14	Hyundai Engineering & Construction Co.	Korea Republic	Diversified	.	8 063	.	5 405	.	30 981
15	New World Development Co. Limited	Hong Kong, China	Construction	2 060	14 030	0 800	2 580	.	14 840
16	Guangdong Investment Limited	Hong Kong, China	Construction	1 898	3 053	0 676	0 924	15 080	16 500
17	Citic Pacific Limited	Hong Kong, China	Diversified	1 834	8 733	0 912	2 154	8 262	11 800
18	PETRONAS - Petroliaam Nasional Berhad	Malaysia	Diversified	.	20 990	.	10 055	.	13 000
19	Shougang Corporation	China	Oil	1 600	6 640	1 040	4 390	.	218 158
20	Fraser & Neave Limited	Singapore	Diversified	1 578	4 273	1 230	1 912	11 461	13 131
21	Samsung Electronics Co. Limited	Korea Republic	Food	.	16 301	.	13 050	.	57 817
22	Singapore Airlines Limited	Singapore	Electronics and elec	1 546	9 111	3 454	4 727	2 957	13 258
23	Companhia Vale do Rio Doce	Brazil	trical	1 509	14 332	3 320	4 744	7 432	42 456
24	Enersis S.A.	Chile	Transport	.	14 281	.	0 890	.	14 366
25	Acer Incorporated	Taiwan	Transport Electrical Services Diversified	1 376	2 946	3 204	4 217	6 792	12 342

(Source: UNCTAD, *World Investment Report 2000: Foreign Direct Investment and the Challenge of Development*, figura I.18, p. 41.)

Table 9. The largest 40 multinational companies in the world, ranked by assets owned (billions of dollars and number of employees)

Nr.	FMN	Country	Industry	Capital		Sales		Employees	
				Foreign	total	Foreign	total	foreign	total
1	General Electric	U.S.	Electronics	97.4	304.0	24.5	90.8	111 000	276 000
2	Ford Motor Company	U.S.	Auto	72.5	275.4	48.0	153.6	174 105	363 892
3	Royal Dutch/Shell Group	Netherlands / United Kingdom	Oil	70.0	115.0	69.0	128.0	65 000	105 000
4	General Motors	U.S.	Auto	0.0	228.9	51.0	178.2	...	608 000
5	Exxon Corporation	U.S.	Oil	54.6	96.1	104.8	120.3	...	80 000
6	Toyota	Japan	Auto	41.8	105.0	50.4	88.5	...	159 035
7	IBM	U.S.	Computers	39.9	81.5	48.9	78.5	134 815	269 465
8	Volkswagen Group	Germany	Auto	...	57.0	42.7	65.0	133 906	279 892
9	Nestlé SA	Switzerland	Food	31.6	37.7	47.6	48.3	219 442	225 808
10	Daimler-Benz AG *	Germany	Auto	30.9	76.2	46.1	69.0	74 802	300 068
11	Mobil Corporation	U.S.	Oil	30.4	43.6	36.8	64.3	22 200	42 700
12	FIAT Spa	Italy	Auto	30.0	69.1	20.2	50.6	94 877	242 322
13	Hoechst AG	Germany	Chemical	29.0	34.0	24.3	30.0	...	137 374
14	Asea Brown Boveri (ABB)	Switzerland	Electrical	...	29.8	30.4	31.3	200 574	213 057
15	Bayer AG	Germany	Chemical	...	30.3	...	32.0	...	144 600
16	Elf Aquitaine SA	France	Petro	26.7	42.0	25.6	42.3	40500	83 700
17	Nissan Motor Co., Ltd.	Japan	Auto	26.5	57.6	27.8	49.7	...	137 201
18	Unilever	Netherlands / United Kingdom	Food	25.6	30.8	44.8	46.4	262 840	269 315
19	Siemens AG	Germany	Electronics	25.6	67.1	40.0	60.6	201 141	386 000
20	Roche Holding AG	Switzerland	Pharmaceutics	...	37.6	12.7	12.9	41 832	51 643
21	Sony Corporation	Japan	Electronics	...	48.2	40.3	51.1	...	173 000
22	Mitsubishi Corporation	Japan	Diversified	21.9	67.1	41.5	120.4	...	8 401
23	Seagram Company	Canada	Feeders	21.8	22.2	9.4	9.7	...	31 000
24	Honda Motor Co., Ltd.	Japan	Auto	21.5	36.5	31.5	45.4	...	109 400
25	BMW AG	Germany	Auto	20.3	31.8	26.4	35.9	52 149	117 624
26	Alcatel Alsthom Cie	France	Electronics	20.3	41.9	25.9	31.0	...	189 549
27	Philips Electronics N.V.	Netherlands	Electronics	20.1	25.5	33.0	33.5	206 236	252 268
28	News Corporation	Australia	Media	20.0	30.7	9.5	10.7	...	28 220
29	Philip Morris	U.S.	Feeders	19.4	55.9	32.1	56.1	...	152 000
30	British Petroleum (BP) *	United Kingdom	Oil	19.2	32.6	36.5	71.3	37 600	55 650
31	Hewlett-Packard	U.S.	Electronics	18.5	31.7	23.8	42.9	...	121 900
32	Total SA	France	Oil	...	25.2	23.4	31.9	...	54 391
33	Renault SA	France	Auto	18.3	34.9	18.5	35.6	45 860	141 315
34	Cable and Wireless Plc	United Kingdom	Telecommunications	...	21.6	7.8	11.5	33 740	46 550
35	Mitsui & Co., Ltd.	Japan	Diversified	17.9	55.5	52.3	132.6	...	10 994
36	Rhone-Poulenc SA	France	Chemical	17.8	27.5	11.5	15.0	...	68 377

Nr.	FMN	Country	Industry	Capital		Sales		Employees	
				Foreign	total	Foreign	total	foreign	total
37	Viag AG	Germany	Diversified	17.4	32.7	15.9	27.6	...	95 561
38	BASF AG	Germany	Chemical	...	26.8	23.9	32.2	...	104 979
39	Itochu Corporation	Japan	Trade	16.7	56.8	48.7	117.7	2 600	8 878
40	Nissho Iwai Corporation	Japan	Trade	16.6	40.4	32.3	75.5	2 068	6 398

(Source: UNCTAD, *World Investment Report 2000: Foreign Direct Investment and the Challenge of Development*, figura I.19, p. 43.)

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EDUCATIONAL MANAGEMENT- AS THE RESPONSE TO THE SOCIAL-ECONOMIC CRISIS IN CONTEMPORARY EUROPE

Orțan Florica

Taking carefully into consideration the way in which emerged and evolved the actual economic and financial crisis, in Europe and in Romania, one can conclude that the educational management, as an academic program, or as a scientific research, can provide some solutions. First are analyzed the initiatives taken by the decision factors from the superior European education, in 1999, before the breaking out of the crisis, through the Bologna Convention. Due to the educational management's particularity to establish a communication channel between academics, specialists in educational sciences, educational institutions managers and political leaders, are presented the beneficial effects which a number of decisions like the stimulation of young people's interest for the studying of economical and entrepreneurial sciences, systematic programs open socially and culturally of knowing the foreign languages, the analysis of career's dynamic in parallel to the modernization of the career education, could have.

Educational Management- as the Response to the Social-Economic Crisis in Contemporary Europe

Orțan Florica

A few decades after the ending of Second World War, Europe was the witness of some velvet revolutions, including a bloody revolution in Romania, after which the communist system collapsed.

The hopes that accompanied the long period of transition and of adherence to the democratic traditions and to a united Europe were interrupted by a serious economic and financial crisis. As it is known, the crisis, which first started in The United States of America in 2008, expanded across Europe, a little bit later, but more violently in Romania where it surprised us extremely vulnerable and unprepared.

The main problem that we are facing is if the decisions of educational management from the level of a university or from a national and European level can contribute significantly to the attenuation of the actual economic crisis. We also ask, in a democratic way, which political decisions or of educational management can be taken and what their effects will be.

Let's determine some regulations taken by the European responsible factors before the bursting of the crisis. As it is known through the Bologna Declaration, from 1999, the responsible factors from the educational level initiated a long process of homogenization of European education, so that the education to be more efficient facing the severe social-economic problems of our continent. Studies have been restructured in order to make bachelor, master and doctor's degree aiming the compatibility between the academic educational systems and the introduction of transferrable credits. The transnational hypothesis of the university represents of course, an earlier challenge. We want to mention, in this context, the invocation of John Allen "which defines university like an organisation which can be reduced, almost entirely, at people, whose task, in a variety of roles, is to keep on searching the truth and the knowledge that will be disseminated, through communication, firstly among young people." (Stefan Buzarnescu, 2004, pag. 241). Such a definition corresponds to the conception of Paul Temple, who ironically observed that some universities were in the head of the complex process of internationalisation

and globalization which have acted as global market institutions. The internationalization of European higher education has been facilitated by the transferable credit system, which evolved in two phases:

- a. internal adjustment of universities, through the transformation of the old academic programs in the permeable system of transferrable credits,
- b. the establishment of a set of rules and procedures through which the credits to be recognized between universities and to favor in this way the students' and the teachers' mobility (Stefan Buzarnescu, 2004, pag. 253).

The illusion that through decisions taken by responsible factors, the European education could become harmonious in a short period of time and the circulation of scientific, technical and cultural information, was quickly crumbled. The spreading of transferrable credit system developed slowly, the students' and the teachers' mobility being delayed not only by financial and bureaucratic difficulties, but also by small number of universities which speak several foreign languages.

Given that Europe as a whole cannot respond promptly and appropriately to crisis calls, and national governments face increasing difficulties, the opportunities that appear at the level of some educational institutions from one country or another, are promising.

The current economical and financial crisis from Romania generated complex, unbelievable problems in all sectors of economic life, which continued to manifest themselves.

This brings us to a problem closer to our possibilities. What kind of decisions can we have, the specialists in educational sciences, in order to ameliorate the actual situation and in order to open more advantageous perspectives?

Even bigger hopes fall on the faculties with an economic profile, which could give economic and financial projects, through which we could decrease the most severe effects of the crisis.

What other solutions taken at an institutional level could have beneficial effects?

Let's take into consideration the cruel reality of intempemstive bankruptcies, the big number of firms which closed their activity and the fear that this process will go on, so that some activities will stop.

Political and legal regulations taken by the Parliament and the Government are decisive. Through these regulations they should promote the economical activity. The managers of the educational institutions could find their ways in this context giving a bigger attention to the economic and entrepreneurial training of the young people.

The economic sciences chairs could interfere supporting young people's interest for the economic preparation for the world of business. We could take into consideration not only measures that concern the number of students, but also the structure of the curriculum, giving a bigger attention to those subjects and modules that broadly speak about the beginning, the development and the efficiency of business.

The psycho-pedagogical sciences could also offer help if they would offer more efficient patterns for the career counseling. It has been observed that the complex activity of career counseling is appreciated as "a rational process of informing and testing the person counseled, the testing based on the use of quantitative evaluation" (G. Tomsa, V. Ionel, M. Popescu, 2008, pag. 478). It was also noticed that in counseling problems emotional and familiar aspects could appear. An important role occupy the individual preferences, the parents' and friends' advice. The career education appears to be a complex process where appears beside building a career or the decision to follow a certain career, elements more or less related, but also the knowing of the world of jobs.

The educational sciences can interfere in this direction for an appropriate knowledge of jobs, the accurate description of jobs and the study and hiring conditions and of course the salary.

Another set of decisions could be taken not only at the academic level, but also by the community leaders, starting from the reality that millions of young people and grown-ups are working in different European countries: Italy, Spain, Germany, etc.

In our opinion the best decision in this respect would be the multiplication of foreign language programs: English, French, etc. coordinated by the philology faculties in a large social opening. This kind of programs could be funded from European funds or budget resources.

The experience so far demonstrated outstanding skills in the field of information, which weren't supported enough by the political factors. At the academic level from the leaders' initiative and the chair of Informatics, systematic activities that attract the young people in this area could be initiated.

The specialists in the sciences of education are increasingly realizing the need for systematic studies regarding the dynamics of jobs in Romania on the whole or from certain areas, or European countries. It would be desirable a direct communication between the researchers and the decision factors from academic level and from the community level. We take into consideration not only the funding of these programs but also the quick dissemination of the conclusions.

The current economic and financial crisis has destroyed the myth according to which the educational management is and it should remain a neutral academic discipline and placed at a certain distance in reality. The specialist in educational management has the duty to discuss with the manager of an educational institution and after that in collaboration with other leaders and finally to extract well-balanced decisions, the only viable way to break the deadlock.

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COMMUNICATION AND CONFLICT IN PUBLIC INSTITUTIONS

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The importance given throughout the world to public management issues and especially to the quality of management process, having central coordinates the enhancing of the institutional capacity and building an effective and efficient strategic management, is a proven argument of the necessity of studying the phenomena that have an impact on the managers' activity.

There isn't any successful organization without conflicts. These should be regarded as a ubiquitous reality in the world of organizations. Conflicts are considered necessary to enable the development of the organization and to make conditions for change.

In Romania, in most organizations, not only private but also public, people work in a rather tense environment. It is known that employees from public sector are required to perform work at a very high standard on little money. This way may be explained the high percentage of work disputes. In the case of employment relationship, conflicts have a higher cost, but a hidden one, unexpected in the budget. Most organizations do not realize these costs result from poor management of conflict situations.

Managers' responsibility is to admit, control and solve conflicts so as to increase organizational performance, the first step in solving a conflict being to deal it as an opportunity. This research focused on the role of communication in the process of managing the conflict. To effectively reduce conflict, organizations must continually ensure that managers, through their personal style and behaviour, do not cause frustration, conflicts of personality or other type of conflict, and they reduce the probability of triggering conflicts through decisions, policies developed and conducted processes in the domain of communication,

The research undertaken in The Inspectorate of the Police of Mehedinti County is an opening for this distinct field of public administration. In the research conducted so far there is a focus rather on individual than on group or collective of employees and on particular aspects of daily activity occurred at work, the evaluations having a strong psychological character, neglecting the psycho-sociologic one. We believe that such an approach should be continued through an extensive research in all structures of the Ministry of Administration and Interior, especially in the current context marked by profound and numerous changes that generate conflict.

Keywords: communication, conflict, conflict management, manager, public institutions

JEL Codes: M10, M12, M54

I.Introduction

Present reflections regarding organisation, especially of work, are oriented towards the identification of flexible and evolving forms that are able to prepare the development of the organisation under a strong competitive environment. Flexibility and evolution involve broadening the decisional horizon of managers and increasing the autonomy, the freedom to act of the subordinates. Both - the decisional horizon and the autonomy - depend on both the process of acquiring skills, as well as their vertically and horizontal transmission on any organization. The process of acquisition and transmission of competence is based on the access to knowledge of the human resources of the organization through a culture capable of assuring the multi-

dimensional integration of hierarchies. In such a culture, managers and subordinates come to understand and solve problems through communication that derives from strategic thinking. Organizational communication can be defined through a discourse for both overall economic and social agents and their employees. The first concerns of an organization are to address their employees. In this case, the organization has the ability to communicate to employees by talking about the production of goods, services, and their distribution. The organization informs its interlocutors, the employees, through a message whose content covers: the nature of activities carried out, structural organization, resources, operation and results. The overall messages for their employees means internal communication. Regarding internal communication, it should be noted that the organization faces a number of difficulties related to the needs and expectations of employees. They often perceive internal communication as a form of propaganda and they assimilate it to threats. Therefore, the organization must establish trustful relationships in order to avoid failures. The language necessary to render specific internal communication (the nature of the activities, perceptions, objectives, actions and constraints) is transposed into the internal communication strategy.

Communication plays a central role in the approach to optimize the organizational climate and thus in the overcoming conflict situations. Identifying the causes of conflict is an extremely difficult task, given that recent studies on the issue emphasize the need to take into account contextual factors and circumstances. It is therefore very difficult (if not impossible) the task of providing generalizing explanations to some fluid, particular situations. Causes of conflict are numerous. This is due to the complexity of relationships that arise from the interaction of the parties involved. If we use an economic term to describe this interaction, we could say that human relations are the "market" where the wishes and interests of each employee interfere. Depending on this individual goals there is set a relative balance of the social interactions. The balance of human relations is, therefore, the result of "supply and demand" from the market of individual goals. By extending this model to a larger scale, we could say that the balance is determined by the harmonization of general interest and it is characterized by the consensus of the parties. Or, in this space, communication is the only bridge between different interests or factions that lead to the strengthening of a common area of interaction between relational parties.

II. Research Methodology

Communication plays an essential role in conflict management. For this reason, it is strictly required to study how the communication process is carried out in public institutions. It was selected as object of study the Inspectorate of the Police of Mehedinti County. To investigate the views of employees, it was considered that such a quantitative research (survey) is the most efficient way, by administering a questionnaire. In the approach of designing the questionnaire, an analysis of instruments used to measure conflict issues was previously accomplished: Conflict Management Research, Teleometrie, 1996, Rahim Organizational Conflict Inventory I and II (ROCI-I and II) (Rahim, 2001) Questionnaire and the Decision Conflict and Cooperation (DCCQ) (Dalton and Cosier, 1989), etc. In addition, there are some instruments based on internet that measure aspects of conflict management (Psychtests.com, 2002). The questionnaires were selected because, in their development psychometric processes were used, thus demonstrating its empirical credibility.

Based on the study, a questionnaire was developed comprising 30 items of which five are signage referring to the employee. Of the 25 items related to the topic investigated, 23 have multiple items, while the other two involve the hierarchy of responses. The questionnaire was administered to employees of the Inspectorate of the Police of Mehedinti County. Data collection was conducted from the 18th September to the 25th November 2010 and the interviewed subjects were informed about the fact that the questions were designed to help

carrying out this work and their answers will be used only for that purpose, and their names will not be mentioned. There were administered 106 questionnaires. Before placing responses in the database, it has been made a preliminary analysis of the collected questionnaires. It was found that all 106 questionnaires are valid. Data processing was performed with SPSS software package, version 17.

III. The results of the research

When the behaviour of a manager is a direct or proximate cause of conflict, the effects are limited to the employees involved. But when this is an indirect cause or a basis cause, the behaviour of the manager affects management systems, which cause conflicts between lots of employees at their turn. The direct way of interaction between manager and employees represents a mechanism to reduce conflict conditions.

When asked how to carry out direct communication between superiors and employees, 75,5 % of the investigated staff declared that they discuss all the time matters of current activity, 12,3% said that this happens formally, during meetings, 10,4 % mentioned this sometimes happen and only 1,9 % state that there was never a consultation between them on current problems (Table no. 1.).

Table no. 1. Percentage of appraisals regarding the way employees discuss with their superior current problems

	Frequency	%	% cumulated
Yes, all the time	80	75,5	75,5
During meetings	13	12,3	87,7
Sometimes	11	10,4	98,1
No, never	2	1,9	100,0
Total	106	100,0	

Source: Performed by the author

Effective and efficient communication depends also on the way we communicate in a certain situation, namely communication style. Communication style must be appropriate to purpose and objectives of communication, receiver, and communication channel (media) and communication context. In the process of organizational communication, the manager's communication style has an impact not only on the effectiveness and efficiency of communication, but also the climate of communication in general. The manager communicates in order to fulfill some definite and specific objectives and not for the pleasure to communicate. In order to fulfil the objectives, the manager, starting from a self-knowledge of trends, should have the flexibility, knowledge and necessary skills to adopt the appropriate style in a specific situation and context to each communication act.

Regarding the degree in which orders and instructions received from superiors are understood, as we can see in table 2, 80,2 % of those questioned consider that they fulfil this requirement, 9,4 % state that sometimes orders are clear, 9,4 % don't understand what are they asked to do and only 1 % sustain that orders aren't clear.

Table no. 2. Structure of employees' opinion regarding the clearness of the orders received

	Frequency	%	% cumulated
Yes, always	85	80,2	80,2
I don't understand what I'm asked	10	9,4	89,6
Often	10	9,4	99,1
No	1	0,9	100,0
Total	106	100,0	

Source: Performed by the author

The degree in which communication process is opened was assessed and it was noticed that among those investigated 92,5 % required further explanations or repeating orders without problems and only 7,5 % couldn't clarify the nature and content of orders. (Table no.3)

Table no. 3. The percentage of appraisal regarding employees' response to require further explanation or repeating orders

	Frequency	%	% cumulated
Yes	98	92,5	92,5
No	8	7,5	100,0
Total	106	100,0	

Source: Performed by the author

Managers always have preconceived notions, based on their roles and perspectives, on the way conflicts should be solved. They expect that their subordinates see things they way they see, but when employees act differently they expected, managers see this as a problem rather than a valuable resource. But actually, each person perceives the others and their environment in a unique way, especially when someone has a superior role, while the other person is a subordinate in an organization. Managers are focused on a general image, while most employees focus on details. Managers are responsible for others, while subordinates are responsible for themselves. Managers have more power, while subordinates have less. These differences and other determine different perspectives of managers and subordinates on conflict, and therefore, it is possible to have different opinions about solving. The questionnaire measured the extent to which employees are willing to offer a contrary solution to that offered by the manager (Table no.4). We notice that 62,3 % of respondents would expose an opposite solution, 22,6 % would expose it thoughtfully, 9,4 % wouldn't do that and 5,7 % justify the attitude not to proceed in such a manner to reduce chances of promotion.

Table no. 4. Assessment of the degree in which respondents are willing to present to the manager a solution contrary to his opinion

	Frequency	%	% cumulated
No, he doesn't bear to be contradicted	10	9,4	9,4
In no case, it would cost me the promotion	6	5,7	15,1
Yes, but with more cautions	24	22,6	37,7
Yes, if I have troubles	66	62,3	100,0
Total	106	100,0	

Source: Performed by the author

In order to solve efficiently a conflict, managers must accept that thoughts, feelings and needs of the subordinates are justified from their perspective. This doesn't mean they have to agree with their subordinates; there will be cases when decisions should be taken and applied over their objections. However, this means that each employee's perspective is important and it should be included in decision making. This happens when the manager really listens, sides with employee's perspective to know how he feels and to put him in his place and considers that perspective as an element in decision making. This empathy encourages recognition and allows balanced and informed solving. More important, his presence will be obvious among subordinates and for finding solutions supporting the interested parties.

Regarding the manner of communication 35, 8 % of the employees consider that it's imperative to know the rules of communication 31, 1 % state that you must take into account the context, 17, 9 % bring honesty to the forefront and only 15, 1 % is on an opposite position (Table no. 5.).

Table no. 5. Communication with superiors requires the knowledge of the rules

	Frequency	%	% cumulated
Yes, certainly	38	35,8	35,8
Depends on the situation	33	31,1	67,0
Not necessarily	16	15,1	82,1
No, you only have to be honest	19	17,9	100,0
Total	106	100,0	

Source: Performed by the author

In terms of communication with colleagues, 73, 6% of the employees interviewed (Table no. 6.) state that is always beneficial, 25, 5% considers that the convenience of communication depends on context and 1% doesn't consider this beneficial.

Table no. 6. Do you consider beneficial to communicate with colleagues?

	Frequency	%	% cumulated
Yes, always	78	73,6	73,6
Depends on the situation	27	25,5	99,1
No	1	0,9	100,0
Total	106	100,0	

Source: Performed by the author

A system of solving conflicts should determine the employees to have more confidence to get involved and to provide direct information, with knowledge that any dispute will be solved correctly.

IV. Conclusions

In order to built and maintain confidence between employees, management should value all operational channels of communication, to have only one voice and to be perceived consistent. However, managers may be seen inconsistent and actually to be inconsistent – although they are sincere in their perspective. This can happen in various circumstances: when managers speak from different circumstances or perspectives, when someone presents details and someone else extensions, when managers reach different conclusions of the same facts and when on one or

more managers do not really understand real facts. This kind of circumstances probably exists between managers at different levels, who have different roles and responsibilities and therefore disseminate different types of information.

Management always takes decisions capable of causing conflicts because they don't listen to employees' needs. Communication exists, but there isn't a wish or a specific system to understand really what they say. An efficient system to solve conflicts involves a process of listening and improves the bottom-up communication. According to confidentiality obligations, the relevant data collected from cases handled by the system should return to management. This method provides the management valuable information regarding behaviour patterns, trends, and references of the employee or other problems existent in the labour system.

The research shows that the manager is, even in public sector, a major actor in reducing conflicts. The main way in which a manager can create an environment without conflicts is to create a climate based on communication.

Communication requires to each employee to balance the assertiveness of his views and concerns with the views and concerns of the other colleagues.

Communication is more than a way to solve conflicts. It may be used to achieve goals, to solve problems, to create new opportunities and realize other things that fulfill best the needs of interested parties.

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THE ROLE OF THE E-PROCUREMENT IN THE PURCHASING PROCESS

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This article aims to examine the role of the E-procurement forms in the six phases of the purchasing process. The paper starts with an introductory part about the purchasing process. Next, based on a literature review we selected and defined the most important forms of E-procurement. Furthermore, we develop a theoretical framework that suggests what form of E-procurement is best to use in every phase of the purchasing process. At the end of the paper we draw conclusions and we set some ground rules for managers regarding to the implementation of an E-procurement form.

*Keywords: purchasing, E-procurement; management, supply chain management, optimization
Coduri JEL: M15, 032*

1. Introduction

It appears that during the past few years purchasing has begun to play an ever more important role in the strategy of the firm (Weele, 2010). In order to survive, managers have begun to rethink their competitive priorities and their value chain. Increasing numbers of organizations have recognized that E-procurement holds the potential to transform their competitive performance for the better.

E-procurement has made substantial technological advantages over the past few years and is expected to continue improving efficiency and productivity in the future. Lederer, Mirchandani and Sims (2001) proposed that an organization could use the E-procurement forms to create strategic advantage through improved customer relationships resulting from greater business efficiency and better information access and flexibility.

A large number of E-procurement applications are available on the market and it could be hard for companies to know what application to choose and implement. Companies may answer the following questions regarding E-procurement:

- if they should implement E-procurement?
- it is really beneficial for them to implement E-procurement?
- what is the impact of implementing a form of E-procurement over the company?
- which form should they choose?
- how they should use E-procurement in every phase of the purchasing process?

The paper starts with an introductory part about the purchasing process. We provide several definitions of purchasing and we describe the phases of the purchasing process. Next, based on a literature review we present the main well known forms of E-procurement.

Furthermore, we present a theoretical framework that indicates what form of E-procurement is best to use in each of the six phases of the purchasing process. At the end of the paper we draw conclusions and we present some guidelines for managers regarding to the implementation of E-procurement.

2. The purchasing process

Over the time many definitions have been done for purchasing management. At the beginning, purchasing has been seen as an administrative and operational activity. Thus, it has been defined as follow as “buying the right materials, in the right quantity, at the right moment, at the right price and from the right supplier” (Heinritz, Farrwell and Smith 1986: 15).

Over the last decades, the definition of purchasing management became wider and purchasing has become a strategic activity for organizations. That is why it is defined as “the behavior of an organization towards its suppliers” (Gadde and Hakkansson, 1993: 8).

Van Weele (2010) defines the purchasing process as obtaining from external sources all the goods and services that are needed for maintaining and developing direct and indirect production activities in the best conditions. The author divides the purchasing process in two parts:

- tactical purchasing;
- operational purchasing

Each of this parts comprises three specific phases, resulting the following six phases of purchasing process:

1. *Specification* – this is the phase where all the needed materials and services for maintaining and developing direct and indirect production activities are identified.
2. *Selection of suppliers* – this phase consists in identification, evaluation and selection between different suppliers.
3. *Contracting* – in this phase the prices are negotiated and the contracts are concluded with the suppliers.
4. *Ordering* – in this phase goods and services are ordered from the selected suppliers with whom contracts have been done before.
5. *Monitoring* – this phase consists in tracking deliveries of goods and services that must be in accordance with those set in the contract.
6. *Evaluation* – in this final phase, the analysis of the purchasing process is done.

All of these phases are presented in the framework of the purchasing process (figure 1).

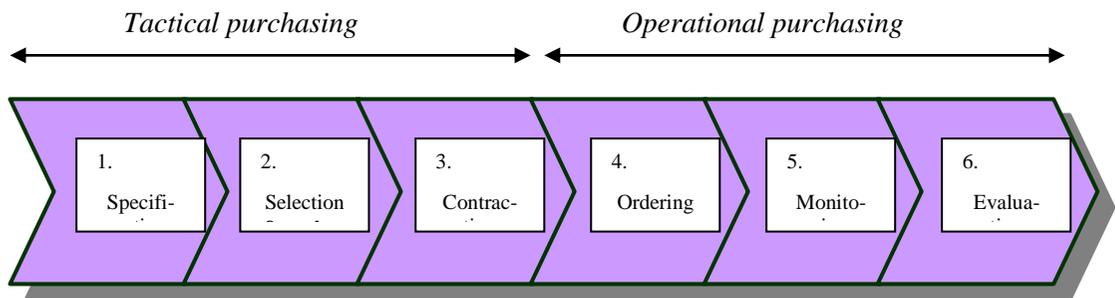


Figure1. The framework of the purchasing process

Source: Weele, A. J. van, *Purchasing and supply chain management*, Thomson Learning Business Press, London, 2010

In our view, the purchasing process consists in exploration, discovery and exploitation of markets and organizations that provide resources to obtain and use products and services in the best conditions.

3. E-procurement forms

The concept of E-procurement has many different meanings ranging from shopping on the internet (through reverse auction) to collaborative initiatives taking place in virtual meetings. There are more definitions given to the E-procurement. Van Weele (2010) considers that “E-procurement includes web technology-based purchasing solutions aimed at simplifying commercial transactions within and between organizations and information technology solutions for ordering, logistics and handling systems as well as for payment systems”. E-procurement is

defined by de Boer, Harink, Heijboer (2002: 120) as “using Internet technology in the purchasing process”.

A large number of E-procurement forms can be distinguished in the literature. In this article we choose to focus on the following forms of E-procurement (mentioned by Boer, Harink, Heijboer, 2002): *E-ordering*, *Web-based ERP*, *E-sourcing*, *E-tendering*, *E-reverse auction*, *E-informing*.
E-ordering

E-ordering focus on the process of creating and approving purchasing requisitions, placing the orders and receiving the goods and services ordered using a software system based on internet technology. An E-catalog is used by all the employees from the organization for ordering items that are needed. In the case of E-ordering the goods and services ordered are non product related (indirect goods and services).

Web-based ERP (Enterprise Resource Planning)

Web-based ERP is similar with the E-ordering, the only difference is that in the case of web-based ERP the goods and services ordered are product related.

E-sourcing

E-sourcing allows identifying new suppliers for a specific category of purchasing requirements using internet technologies across spatial boundaries. Most important benefits of E-sourcing are increased decision making flexibility and lower prices.

E-tendering

E-tendering is the process of sending RFI (request for information) and RFP (request for proposal) to suppliers and receiving their response using internet technologies. Often e-tendering is supported by an e-tendering system that can analyze the responses received from the suppliers.

E-reverse auction

E-reverse auction enables the purchasing organization to buy goods and services needed from the supplier that has the lowest price or combination of lowest price and other conditions as well using internet technologies.

E-informing

E-informing does not involve transactions but it handles gathering and disseminating purchasing information both from the internal and external parties.

4. The theoretical framework for the use of the E-procurements forms in the six phases of the purchasing process

Because of the variety of the E-procurement forms available on the market it is difficult for organizations to know which one to choose and how is best to use them during the purchasing process. Based on the E-procurement forms and on the phases of the purchasing process that we have presented earlier in this article, we created a theoretical framework that indicates what E-procurement form is best to use in each purchasing phase (see figure 2).

	<i>Specification</i>	<i>Selection</i>	<i>Contracting</i>	<i>Ordering</i>	<i>Monitoring</i>	<i>Evaluation</i>
E-ordering				* Cost savings Increased efficiency	* Cost savings Increased efficiency	* Cost savings Increased efficiency
				*	*	*

Web-based ERP				Cost savings Increased efficiency	Cost savings Increased efficiency	Cost savings Increased efficiency
E-sourcing	* Increased competitive force Cost savings					
E-tendering		* Time savings Less labor consuming				
E-reverse auction			* Cost savings Time savings			
E-informing	* Increased purchasing power Improved commercial relationships with suppliers Improved control over the purchasing process	* Increased purchasing power Improved commercial relationships with suppliers Improved control over the purchasing process	* Increased purchasing power Improved commercial relationships with suppliers Improved control over the purchasing process	* Increased purchasing power Improved commercial relationships with suppliers Improved control over the purchasing process	* Increased purchasing power Improved commercial relationships with suppliers Improved control over the purchasing process	* Increased purchasing power Improved commercial relationships with suppliers Improved control over the purchasing process

Figure 2: The theoretical framework for the use of E-procurement forms in the purchasing process

As you can see in this framework we indicate through an asterisk in which phase of the purchasing process is best to use the E-procurement forms. Beside this, we mention the major benefits that an organization can achieve using each E-procurement form. So, for example, E-ordering and Web-based ERP can be best used in the last three phases of the purchasing process (operational purchasing) and they can provide cost savings and improved efficiency of the purchasing process. E-sourcing is best to be used in the specification phase and can offer to the organizations increased competitive force and cost savings. E-tendering can be used in the selection phase and the major benefits that can provide are: time savings and less labor consuming activities. E-reverse auction is best to be used in the contracting phase and can offer cost and time savings. The last form of E-procurement, E-informing may be used in all six phases of the purchasing process and can provide the following benefits: increased purchasing power, improved commercial relationships with the suppliers and improved control over the purchasing process.

5. Conclusions

The framework that we presented in this paper is theoretical and it hasn't been tested yet. We have to test it in a number of organizations and to compare the practical results with the

theoretical ones. Based on the practical insights we will be able to draw conclusions and to improve the framework.

The theoretical framework can be used by managers as the starting point in the process of adopting and implementing E-procurement in their organizations. Managers have to analyze carefully what are the advantages that they can provide and what form of E-procurement is best to use in each phase of the purchasing process. They have to take into account also the main barriers that they have to overcome in the implementation process of the E-procurement. Only after this analysis they should decide if they will implement an E-procurement form and if yes what form to choose.

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STUDY ON QUALITY PARAMETERS AND ENZYMATIC ACTIVITY OF GRAIN MILL PRODUCTS REGION IN TRANSYLVANIA

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This paper aims at determining the main quality parameters of grain mill products in the Transylvania region, also studying and emphasizing the enzymatic activity of flour. Determination of quality characteristics of grain mill products entails establishing physical, chemical and sensory parameters and assessing them against the limits imposed by law.

Analysis was performed on samples formed by mixing basic medium extracted from different batches. Incremental size, sampling tools, how to extract them, the training sample and laboratory environments, packaging and labeling of samples were performed according to STAS 1068 69.

Determination of the fall (Falling Number), an empirical test that relies on the ability of endogenous α -amylase to reduce viscosity of the treated warm flour suspension is used, large scale milling and bakery industry to predict and assess the Baking quality of flour. In sprouted wheat, characterised by a low Falling number, dextrin produced by the action of α -amylase leads to a sticky bread core. Experiments suggest that the values fall turnover (FN) does not shrink in direct proportion to the percentage of germinating seeds. Amylolytic activity depends on the stage of sprouting of grains. Lack of α -amylase activity can be corrected by adding malt grain α -amylase or fungal α -amylase.

Keywords: quality control, parameters, grain mill products, α -amylase activity, Transilvania, food quality

JEL Cods: L15, O13, Q5, Q53

1. General aspects

Enzymes are used for a long time to convert complex carbohydrates in the fermentation processes. Except for sugar processing and use of glucose isomerase cyclodextrin glycodextriltransferase, enzymes are used for hydrolysing carbohydrates, with reducing the size of macromolecules as the main transformation suffered.

Enzymes carry all biochemical transformations. Amylase is an enzyme that hydrolyzes amylose, breaking down a specific glycosidic linkage in starch to yield its degradation products in the form of oligosaccharides. Amylase participates in numerous biological processes such as maturation and germination of cereals or in the digestion of starchy substrates by animals and

microorganisms. They are, on the other hand, of significant importance in industry, where their ability to depolymerised starch is paramount in the preparation of glucose syrup or bread. The objective is to transform bakery flour, plus possibly other ingredients (yeast, salt, malt, milk fat) in food preparation and easily preserved by operation of alcoholic fermentation and baking. Alcoholic fermentation is a clear step to understand the role of amylase.

Amylolyze is the process of hydrolysis of starch under the action of α and β amylase. The process is particularly important in dough of flour because its sugars are insufficient to maintain throughout the fermentation in the technological bakery process. Bread obtained only from the fermentation of carbohydrates originating in the flour has a low volume, is dense and undeveloped. Maltose derived from starch hydrolysis is the main sugar that is fermented and thus provides the necessary amount of gas in the final part of the technological process. For this reason, the starch is considered as the main source of carbohydrates in the dough leavening process. In a normal bakery is 6 ... 12% hydrolysed starch in dough. Amylases allow the production of glucose and maltose, which are then fermented; a poor fermentation, resulting in an increase of less than bread. Low percentage of carbohydrates in the flour initial content (0.5 to 2%) involved a hydrolysis of starch in the proportion of 1-2%. The action of amylases in the dough is influenced by environmental conditions: the degree of hydration of the dough, temperature and state of degradation of starch granules. Baking dough cause a gradual increase in internal temperature, with dual action on enzymatic activity and physical state of starch. However, the surface temperature will be about 250 °C. During temperature increase, there is a short period or longer (depending on how baking is done) in which enzymes can act. Amylase is activated by adding water to the dough during the manufacturing.

Dough fermentation and, especially, the production of carbon dioxide are related to the presence of fermentable carbohydrates. The α -amylase activity has a significant effect on excessive water absorption capacity of the dough and the core training. An excessive activity causes an overproduction of dextrin, which leads to a colourless core with large pores, and a colourful crust. The ratio of α and β amylase activity influence the quality of bread. If there is an excess of α -amylase against β -amylase, not all dextrin will be hydrolysed and this leads to the formation of a sticky dough.

2. Experimental part

The determination principle consists in jellifying of flour suspension in a test-tube located in a boiling water bath and measurement of gel liquefaction degree under the influence of amylase. The falling time of grain and its products is the activity criterion of α -amylase enzyme which occurs in small quantities in grain when they are correctly grown and gathered in dry conditions. In conditions of increased cereal moisture, above 15%, especially when crops are gathered in unfavourable weather conditions, activation of α -amylase occurs, which results in starch damage. Dough made of such flour has disadvantageous physio-chemical properties which negatively influence the quality of bread. Therefore, the determination of the damage degree of grain and their products allows classifying and using cereals differently, for example:

- as feed
- in mixtures of damaged cereal and grain not affected by α -amylase
- development of individual technological processes with addition of “improvers” to avoid unexpected losses

2.1. Working mode

Falling-number Hagberg Method (Hagberg, 1961) is a method based on autolytic degradation of starch in starch milk by α -amylase. An increased α -amylase activity resulting in a low viscosity, which is defined as the time in which a metal rod falls through the starch gel. The method is used,

broadly, to measure the trade of grain sprouting. Also, endogenous enzymes are known for their adverse effects when sprouting before harvest.

Pre-harvest sprouting of grain shows the effects of enzymes during germination and also influences the milling industry, bread and beer.

Index fall (Hagberg index) provides information on amylase activity (in α -amylase) and on the process of fermentation that occurs in wheat flour dough. Fall index values are inversely proportional to amylase activity.

Table 1. Index values fall and their influence on flour

Drop index (in seconds)	Comments
60 – 150	Increased amylase activity. This flour is made from sprouted grain bread and its use leads to the core that remains tacky and immature. It is almost useless, unless it is mixed, as appropriate, with other flours with high drop index.
150 – 220	Amylase activity superior to that which is normal. This requires a correction by mixing flour with the flour with the index falling sea or by using special methods of making bread
220 – 280	Normal amylase activity.
> 280 – 300	Low amylase activity. Using these results in bread flour that is not developed, small and middle volume too dry. Requires addition of diastases malt.

Drop method is used for the samples which contain starch as a substrate. It is based on rapid jellifying of flour suspension in a boiling water bath and measuring the gel liquefies under the action of α -amylase.

Equipments:

1. Falling Number Mill 3100 or 120 with a grid $\phi=0.8\text{mm}$;
2. Falling Number device.

Method:

Crush 300 g of wheat to a mill Falling Number. The water bath device is inserted to mark water and bring to boiling temperature is maintained throughout the determination. Weigh $7 \pm 0,05$ g flour, are inserted into the tube viscometer were previously added 25 cm³ of distilled water at 200C with a rubber stopper and shake 20-30 times, until smooth.

With mixer viscometer loose particulate flour that joined the wall of the tube, then insert the tube with mixer viscometer bath water and start the device. Just after 5 seconds after inserting in the bathroom starts shaking suspension in the tube. After 59 seconds stir bring superior position (up or automatically) and after 60 seconds (5-55) falls under its own weight of flour heated gel at a speed that depends on the degree of liquefaction of starch gel.

Time measured from the time the tube viscometer bath water and stirs until it falls on a given distance, expressed in seconds and does the number of falls. Media repeated measurements differ by max $\pm 5\%$. The α -amylase activity Is relationship between the number of drop C inversely and expressed by calculating the „number of softening”

With the number of softening we may calculation the flour mixture with a certain number of falls, from lots of different qualities, so that the processing technology resulting in better quality products.

3. Results and discussion

Samples analyzed were purchased from different locations in the region of Transylvania. For each sample were made ten determinations of the index falls. The average value of determination is placed in the table below.

Table 2. Amylase activity

Sample	Determination value Ic (sec)	Normal value Ic (sec)	Observations
1- Gambas (Alba county)	250	220 – 280	Normal amylase activity.
2- Gambas (Alba county)	220	220 – 280	Normal amylase activity
3- Gambas (Alba county)	217	220 – 280	Normal amylase activity.
4- Aiud (Alba county)	243	220 – 280	Normal amylase activity.
5- Ghirbom (Alba county)	276	220 – 280	Normal amylase activity
6- Blaj (Alba county)	336	220 – 280	Low amylase activity. Using this flour has resulted in bread that is not developed, with low volume and very dry pulp.. Require the addition of diastatic malt.
7- Craciunel (Alba county)	225	220 – 280	Normal amylase activity.
8- Valea Lunga (Alba county)	375	220 – 280	Low amylase activity. Using this flour has resulted in bread that is not developed, with low volume and very dry pulp.. Require the addition of diastatic malt.
9- Blaj (Alba county)	319	220 – 280	Low amylase activity. Using this flour has resulted in bread that is not developed, with low volume and very dry pulp.. Require the addition of diastatic malt.
10- Valea Lunga (Alba county)	322	220 – 280	Low amylase activity. Using this flour has resulted in bread that is not developed, with low volume and very dry pulp.. Require the addition of diastatic malt.
11-Lancram(Alba	264	220 – 280	Normal amylase activity.

Sample	Determination value Ic (sec)	Normal value Ic (sec)	Observations
county)			
12- Lancram(Alba county)	282	220 – 280	Normal amylase activity.
13-Lancram(Alba county)	252	220 – 280	Normal amylase activity.
14- Galda de Jos(Alba county)	270	220 – 280	Normal amylase activity.
15-Galda de Jos(Alba county)	212	150 – 220	Medium activity of alphaamylase
16- Ighiu(Alba county)	193	150 – 220	Medium activity of alphaamylase
17- Ighiu(Alba county)	195	150 – 220	Medium activity of alphaamylase

4. Conclusions

Determination of the fall (Falling Number), an empirical test that relies on the ability of endogenous α -amylase to reduce viscosity of the suspension treated warm flour is used, large scale milling and bakery industry to predict, assess the Baking quality of flour. Falling number – index drop is inversely proportional to α -amylase activity of flour and acceptable field depends on cereal product. In the wheat sprouted, with a low Falling number, dextrin formed by α -amylase action leads to a bread with sticky core. It was found from experiments that the values fall turnover (FN) do not shrink in direct proportion to the percentage of seeds germinate. Amylolytic activity depends on the stage of sprouting of grain. Lack α -amylase activity can be corrected by adding malt grain or fungal α -amylase.

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HUMAN RESOURCES MOTIVATION - A CHALLENGE FOR SMES ECONOMIC PERFORMANCES

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The present research aims to establish and configurate human resources development strategies for the employees of small and medium-sized enterprises (SMEs) that activate in the tourism field of activity (hotels and other accomodation establishments, restaurants, passenger transport, travel agencies, cultural turism agencies). As knowledge role in the contemporary economy is increasing and defining the economical and social context as knowledge-based ones, we shall consider the research frame as the knowledge-based economy.

Moreover, in order to better highlight weaknesses and strenghts of the human resources management approaches and to define recommendations, our research theme is developped as comparative study: similarities and differences within SMEs human resources management practices in Romania and other European Union's country members (the example of Spain was considered).

Keywords: human resources, motivation, profitability, SMEs, tourism

The article's JEL code: M3, M31, L81

Introduction

Our goal is to identify and formulate proposals aimed to improve the SMEs activities and performances from the perspective of the human resources management, as we believe this situational context represents a scientific and practical challenge.

We have chosen the human resources area for our investigation because human resources development (HRD) has gained a permanent role within SMEs (Beardwell, Holden, 2001: 272-273), agencies and nations, increasingly not only as an academic discipline, but as a central theme in the development area (Popescu et al., 2010: 49). Being a combination of training and education, in a broad context of adequate human resources policies (Sutherland, Canwell, 2004: 163-168), HRD ensures the continual improvement and growth of both individual and organization.

SMEs represent the most numerous and important category of enterprises, with multiple economic, technical and social functions (Popescu et al., 2010: 51). SMEs are the most dynamic and vital factor of progress in the contemporary society, main generator of economic performance and substance in any country, major contributor to the national budget, and engine to improve the living standard of the population (www.europa.eu.int/comm). Representing 99% from all enterprises, SMEs are drawing up the main human resources agglomeration. Furthermore, SMEs generate the most of Gross Domestic Product (GDP) in every country - usually 55%-95%, provide employment for most of population (www.europa.eu.int/comm).

In the context of The European Union forming a group of countries with the most intense concerns and performance in supporting and encouraging SMEs, *globalization* involves an uniformization of managerial practices and organizational behaviours (Yamnil, McLean, 2001: 195-208). This is an additional a reason to adopt a comparative approach of HRD from EU countries.

Investigating the correlation between managers approach to motivating the human resources and organizational activity performances, represents the start-up of a research that could lead us to results to be developed afterwards. For instance, the influence of superior-trained and well-motivated human resources on the SMEs outcomes, can be extended to the influence upon the tourism domain and the economy service sector.

Main objective of the paper:

The present paper aims to analyze, as a consequence of managers opinion regarding human resources management, the compatibility between positively motivated employees and superior performances of the SMEs they belong to.

Secondary objectives of the paper:

- to set-up an economic interpretation for *motivated employees (positively or negatively)*, considering the similarities and differences between European Union's country members;
- to establish in what measure positively motivated employees can provide a competitive advantage for the Romanian and Spanish SMEs.

Hypothesis of the research

Three main hypotheses were formulated relevant to the role of human resources motivation and development in SMEs on one side, and sustainable economic performance on the other side.

Based on the previous objectives, the research hypotheses are:

- 2.1) Within the organization, employees represent an important, strategic resource, main creators of economic added value and economic performance.** The rise of the service economy, the increasingly flow of global information, and the growing recognition of the importance of intellectual capital are turning employees knowledge and abilities into a key resource and a source of competitive advantage for the organizations in the global economy;
- 2.2) Based on the human resources management practices, SMEs managers could favourize the compatibility between positively motivated employees and superior performances of the enterprises they belong to;**
- 2.3) Within the contemporary economic context, SMEs development and performance can be achieved by human resources development programmes and concerns, through learning activities and knowledge-based activities, especiallz if we consider that HRD:**
 - a) depends on *the employees education level* and on *the facilities employees have at ther work place;*
 - b) can take place in the organization (*indoor development*) or outside the organization (*outdoor development*).

In order to test these three hypotheses, as a continuation of a research started in 2000, connected to SMEs birth rates and death rates, a number of 117 managers and entrepreneurs were interviewed. The results of these interviews were analyzed in the following empirical part of our paper.

Methodology research

The methodology used is a logical consequence of *the research questions applied within the survey*, representing a first step in choosing the qualitative/quantitative approach (www.socscidiss.bham.ac.uk). For our research, the key question is: *In what measure managers from the SMEs that activate in the field of tourism consider that positively motivated employees determine highly organizational performances?*

We have chosen *the qualitative path* as it refers to managers opinion upon employees motivation-employees performance connection.

Acknowledging the importance of HRD and SMEs performances, we realized a study on a sample of 117 respondents that belong to SMEs from tourism domain: *Accommodation, Restaurants, Passenger Transports, Travel Agencies and Cultural Tourism Organizations*, from different regions of the two countries taken into consideration, measuring 19 variables. The results are based on a *study performed in September and October 2010 in different regions of two European Union's Country members (Romania and Spain) and confirms the research hypothesis regarding DRU and its contribution to SMEs performances*.

Research design: in fundamenting the research, we have taken into consideration the numerous answers received from the 117 respondents. Each question was formulated in order to answer, directly or indirectly to the research hypothesis. The questionnaire includes general, easy-to-answer, closed questions, in order to make the tasks easier for the respondent. A second part is reserved to issues regarding the SMEs profitability and economic performances (Howell, David, 1997: 120-129) and the third part refers to human resources performances. The main purpose of the research is strongly connected to the answers received from the second and third part of the questionnaire.

The data was analyzed using *Statistical Packages for Social Scientists (SPSS) 16.0* and yielded multiple results that are presented sintetically in the present paper. Therefore, the most significant results are highlighted, with a focus on the profile characteristics, and the detailed secondary correlations (Cohen, 1988: 81-95).

Work method: Primary data, through **structured questionnaire**, were collected from a sample of 117 respondents (response rate of survey: 56,80%), randomly selected from among the SMEs engaged in tourism types of activity. The survey elaborated by the researchers group consisted of 20 items. The research adopted a survey method to collect data on the **SMEs general characteristics** (*field of activity, form of propriety, market experience, geographical position, legal form of organization*), **organization performance** (*turnover and profit evolution, tangible assets contribution, average number of services, organization's turnover structure, first three clients and suppliers importance*), **human resources performance** (*employees level of motivation, education, average number of training days, average wage, facilities for employees*) - (Mintzberg, 2004: 87-89).

Results of the study

From all 117 respondents, 86 are from Romania and 31 are from Spain. Both for countries, the micro and small enterprises (less than 49 employees) number is higher than medium ones (more than 50 employees), due to the fact that their number (as a general tendence) is smaller and, also, due to contextual barriers (the access for organizing an interview may be more reduced).

All organizations that have participated to the survey were clasified into two main categories, according to the size criterium: small enterprises (0-49 employees) and medium enterprises (more than 50 employees). As we expected, the survey demonstrated that the majority of the answers came from the small enterprises.

Encouraging harmony and work confort by giving equal material advantages to employees (bonuses, prises, professional and leisure facilities, agreeable work climate) is a management

practice in SMEs. Comparing the two set of results (Romanian and Spain SMEs), the first information is that both romanian and spanish managers do not agree to identical type of motivation for different employee performances. Meanwhile, within spanish SMEs the attitude towards this hypothesis is rather uniform distributed between neutral, agree and strongly agree alternatives, spanish managers tend to agree (more than 60% of the respondents from all types of touristic organizations). This indicates a general concern of the managers to different approaches of personnel motivation according to distinct performance levels. The questionnaire results infirm hypothesis 1 and sustains the human resources complex approaches within SMEs from a service field of activity.

Not giving any suplimentary advantage to employees, except the wage could generate the same organizational performances, as no employee would have the tendence to leave his working places, given the dificult present economical and social conditions. The global economic crisis also affected the tourism domain. This fact is confirmed by the managers' answers related to suplimentary motivation elements for their employees: as for Romania and Spain, most of the answers correspond to *neutral, agree and strongly agree* alternatives. Being aware of the lack of alternatives of their employees, managers do not concern seriously about special types of motivation and act mostly guided by predetermined arguments: employees do not have any alternatives for leaving the job, so there is no need for management to make special effort in human resources motivation. This types of managerial behavoiur confirms hypothesis 2.

In order to achieve a competitive advantage, SMEs need to be able to learn faster than their competitors and also develop a responsive culture (Richman-Hirsh, 2001: 105-120). In light of these pressures, modern organizations need to maintain knowledge about new products and processes (Wells, Schminke, 2001: 135-158), understand what is happening in the outside environment and produce creative using the knowledge and skills of all employed within the organization. This requires co-operation between individuals and groups, free and reliable communication, and a culture of trust (Yamnil, McLean, 2001: 73-84).

Stimulating competition between employees, and giving them material and unmaterial advantages, according to their work results is the best way to high organizational performances. Answers to questions related to hypothesis three of the research, indicates a active preoccupation of managers for rewarding employees after the work effort was made and economic performances were registered. According to the managers' answers, more than 85% of all types of the questioned enterprises choose to motivate their employees according to their prevoius performances. Hypothesis 3 is confirmed.

All these considered, key-changes involving the transition to a competitive SMEs sector should take into consideration the following: creating and implementing human resources development strategies of SMEs, as a prerequisite to increase their performance in the new socio-economic context (Campo-Martinez *et al*, 2010: 862-870). SMEs tend to give greater importance to human resources than larger organizations, because of the simplified hierarchical structure, which promotes greater interaction between management and execution personnel, and, furthermore, higher interest and commitment of organization employees. In our opinion, another sollution represents innovation support within SMEs, fact also sustained by development and implementation of the scientific progress.

Variables used within the research: organization economic performance (OEP), human resources material motivation (HRMM), human resources unmaterial motivation (HRUM) are presented in Table 1.

Variable name	Measurement scale	Variable type	Definition
<i>OEP</i>	Numerical (1-10)	Endogenous	<i>Organization economic performance</i>
<i>HRMM</i>	Numerical (1-5)	Explanatory	<i>Human resources material motivation</i>
<i>HRUM</i>	Numerical (1-5)	Explanatory	<i>Human resoruces unmaterial motivation</i>

Table 1: Main Variables Used within the Research

The results are presented in Table 2.

Explanatory variables	Total sample 117	Medium Romania	Medium Spain	Small Romania	Small Spain
Mean value for OEP	8,33	9	8,30	7,25	8,05
Standard deviation	1,1413	1,1265	1,396	2,527	1,322
Varinace	1,996	1,600	1,949	6,385	1,748
Mean value for HRMM	3,95	4,30	4,38	3,93	3,92
Standard deviation	0,760	0,825	0,707	0,704	0,688
Varinace	0,578	0,678	0,500	0,495	0,474
Mean value for HRUM	3,14	3,13	3,14	5,50	1,67
Standard deviation	3,185	2,031	2,167	8,296	1,029
Varinace	10,142	4,125	4,695	68,818	1,059

Table 2: Mean Value for the Variables Used within the Research

Some of the significant findings of the study tested under *the standard deviations* and *variance* assumptions are given below.

The importance given by managers of tourism enterprises to organizational performance tends to increase as the size of the firm becomes larger (from small to medium enterprises).

The importance given to *Human resources material motivation* is not distributed similarly across small and medium enterprises; managers are more likely give importance to employees' material motivation than to unmaterial forms of motivation. The use of unmaterial motivation is not correlated with the main variable – organization economical performance –fact sustained to the extremely high variance value (10,142). The dependent variable *Human resources material motivation* proved to be associated with the independent variable *Organization economic performance*. The standard deviation measures the error of the assumed association between the independent variable *Organization economic performance* and the dependent variable *Human resources material motivation*, with result less than 1 (0,760) – the error is accepted.

Conclusions

The results of the study demonstrate that managers opinion regarding the way employees should be motivated corresponds with the research hypothesis: a different type and form of motivation should be applied for every employee, according to his/hers work results and performances. Furthermore, the learning capacity and knowledge sharing within SMEs consists of maintaining levels of innovation and remaining competitive, being better prepared to respond to external pressures, improving corporate image by becoming more people orientated. At the organizational level, a successful human resources development programme will prepare the individual to undertake a higher level of work. Hypothesis 1 and 2 are confirmed.

Our research results confirm hypothesis 3: HRD has gained a permanent role within SMEs and ensures the continual improvement and growth of both individual and organization.

As part of the overall development strategy, HRD mainly refers to skilful provision and organization of learning experiences, in order that business goals and organizational growth can be achieved.

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OPPORTUNITY TO REDUCE RESISTANCE TO CHANGE IN A PROCESS OF ORGANIZATIONAL CHANGE

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This paper aims to present the research results conducted on several models of organizational change regarding the identification of the appropriate moment in which the managers' interest should turn towards the reduction of the employees resistance to change. More specifically, we intend to identify when is the best moment to reduce the resistance to change, depending on the change we want to achieve.

Keywords: organizational change, resistance to change, success, opportunity, organizational change model

Cod JEL : O30, O39

Introduction

Successful organizational change depends on many factors. Managers may intervene on some factors and thus can use these as levers in order to reach the established objectives set by the desired change faster and to a greater degree. In the case of other factors, specialist intervention is unnecessary, since specialists can not create the effects on the final outcome in a process of organizational change.

Through this work we don't aim at identifying all the factors on which managers can intervene in order to ensure higher chances of success for a particular change. Our focus in this work turns towards two factors that can ensure a high degree of success of a change. One of these refers to the efficient and effective reduction of the resistance to change of the employees affected by the change. Another one, equally important, is represented by the completion of the actions meant to lead to the implementation of the desired change in a logical manner, well structured and with clearly defined objectives at each step. In other words, the need that an implementation of a change be not chaotic, but to follow a change model, a process of change that would include a clear chain of steps, of stages that need to be completed. This is the reason why many management or organizational change management specialists have suggested change models on which the process of change should be based. Given the fact that the changes that may take place in an organization are extremely diverse, the models recommended by experts for their implementation in the organizations are also extremely diverse.

Models of organizational change

Many specialists concerned with making changes in organizations have proposed, for a greater success of those changes, also a plan of action, an order in which certain activities were recommended to be carried out. This led to the current situation that literature abounds in such theories and models of organizational development and change.

A. Van de Ven and S. Pool (1995) have concluded, after the studies conducted, that the processes of development and change in organizations are explained by experts through four types of theories. These are:

- life cycle theory;
- teleological theory;

- dialectical theory;
- evolutionary theory

Each of these theories shows that change is taking place after a certain sequence of phases of the process (different sequences), in which the mechanisms that take place are customised. In order to see the specific change processes, researchers often combine elements of the four theories presented above. Each of the four theories provides a way to describe the process of change in an organization which actually represents a model of organizational change.

R.M.Kanter, B.A.Stein, Tood D. Jick (1992) conducted a comprehensive analysis of representative models of organizational change. They argue that organizational change is usually modeled as a three-part process. In support of this assertion, the authors indicated above summarize in a table the stages to be completed, according to different specialists, so that change take place.

Table 1. Models of organizational change

MODEL	PROCES		
Lewin(1947)	Unfreeze	Change	Freeze
Beckhard și Hariss(1977)	The current state	The transition state	The future state
Beer (1980)	Dissatisfaction	Process	Modeling
Kanter (1983)	Separation of tradition and crises	Strategic decisions and the first movements	Action and institutionalization
Tichy și Devanna (1986)	Act I Awareness	Act II Mobilization	Act III (Epilogue) Empowerment
Nadler și Tushman (1989)	Energizing	Vision	Posibilizare

Source: R.M.Kanter, B.A.Stein, Tood D. Jick - *The challenge of organizational change*, Free Press, New York, 1992

The specialty literature of our country proposes two representative models of organizational change: the Popescu - Florescu model in 1988 and the Predișcan model in 2001.

Research results

We have considered several models of organizational change and we have noticed that there are many models that do not contain explicitly the step of reducing resistance to change (Moorhead - Griffin 1998, 2009, Lewin 1947, Beckhard and Hariss 1977, J. McCalman and R. Paton 1992, Block 2000, Cooperrider 2003). A relevant example is the model Florescu and Popescu (1988) where the step of reducing resistance to change does not exist. In many models the phase of reducing resistance to change can be inferred from the presentation of actions that aim at making people believe that the proposed change is necessary, even if the name of this stage is not explicitly presented (Kanter 1983, Tichy and Devanna 1986, Nadler and Tushman 1989, John P Kotter in 1995 and 2002).

Kotter's (6) eight step change model can be summarised as:

- 1. Increase urgency** - inspire people to move, make objectives real and relevant.
- 2. Build the guiding team** - get the right people in place with the right emotional commitment, and the right mix of skills and levels.
- 3. Get the vision right** - get the team to establish a simple vision and strategy, focus on emotional and creative aspects necessary to drive service and efficiency.
- 4. Communicate for buy-in** - Involve as many people as possible, communicate the essentials, simply, and to appeal and respond to people's needs. De-clutter communications - make technology work for you rather than against.
- 5. Empower action** - Remove obstacles, enable constructive feedback and lots of support from leaders - reward and recognize progress and achievements.
- 6. Create short-term wins** - Set aims that are easy to achieve - in bite-size chunks. Manageable numbers of initiatives. Finish current stages before starting new ones.
- 7. Don't let up** - Foster and encourage determination and persistence - ongoing change - encourage ongoing progress reporting - highlight achieved and future milestones.
- 8. Make change stick** - Reinforce the value of successful change via recruitment, promotion, new change leaders. Weave change into culture.

In several stages of this model, even if it is not said that the aim is to lower the resistance to change, it is recommended that managers use methods, techniques and procedures aimed at exactly that. These are: communication, positive motivation, encouraging people, etc..

In other models of change this stage is explicitly presented, is given great importance in the change process and is usually positioned before implementing the change. An example is the model presented by J. Ivancevich, James H. Donnely and James Gibson (1989). According to this model, organizational change can be done after following the following steps:

1. Understanding the factors that trigger change
2. Recognition the need for change
3. Diagnosis of the problem
4. Identification of the methods and alternatives that will make the change
5. Presenting the existing conditions
6. Selecting the method
7. Overcome the resistance to change
8. Implementing and coordination of change.

It may be noted that the authors located stage 7 (overcoming resistance to change) before the implementation phase.

In 2001, the model of organizational change proposed by M. Predișcan to be used in particular for achieving strategic large-scale changes in an organization, presents explicitly within the second phase of the model, the phase of reducing resistance to change.

The Predișcan model suggests the following steps and phases.

1. Awareness of the need for change
 - 1.1. Data collection and analysis;
 - 1.2. Identifying the need for change;
 - 1.3. Evaluation of change and choice of the best variant(s).
2. Design of the change
 - 2.1. Develop the implementation schedule of the change;
 - 2.2. Reducing resistance to change;
3. Implementing change
 - 3.1. The actual implementation
 - 3.2. Monitoring, analysis and evaluation of the results
 - 3.3. Improving the change

This model also establishes the actions meant to ensure the reduction of resistance to change before the transition to the implementation of the desired change.

The importance of the actions of reducing resistance to change is particularly large in any process of organizational change. Not infrequently, the failure of a change was given by the opposition of the employees who did not understand well enough the purpose for which the managers wanted to accomplish that change. Of course that the greater the number of employees affected by a change, the greater is the effort that managers need to submit to gain their commitment to change. Obviously not only the number of employees influences the degree of the managers' efforts, or the necessary time to effectively reduce human resistance to change. Analyzing two different organizations we will find that the force with which employees oppose to a change differs greatly. The employees opposition to the managers proposals may be different from one organization to another, from one employee to another, from one change to another, it may strengthen or, on the contrary, weaken, depending on the expression of the following elements:

- organizational culture
- characteristics of the environment in which the organization operates;
- the nature of the activities of the organization;
- emergency of change;
- the extent to which the rhythm of change required by managers is supported by employees;
- management style;
- type of organizational structure;
- the quality of the organization's information system, etc..

There are many situations in organizations when it is necessary to make emergency changes. In such moments there is time to perform all phases of a traditional process of change. Obviously we will not have time to plan the change, and the time that we have available for making a change in practice is extremely short. In such circumstances it is necessary to carry out required changes.

We propose for these cases even a reversal of the order of the stages of a process of organizational change. For the changes required in crisis situations, we recommend the following steps:

1. Identify necessary changes
2. Implementing change;
3. Reducing resistance to change.

The first stage of the process is no longer based on a comprehensive analysis of environment and internal environment of the organization. In crisis conditions it is easier to identify the type of change needed because the events that occurred and resulted in a crisis situation are known. Starting from the effects of these events on the organization it is tried that by identifying the necessary change, the bad influence of these events on the organization be corrected.

After having answered the question: What is to be changed?, we recommend to proceed urgently to the implementation of the changes identified as necessary.

After the change has been implemented we recommend the third stage to be followed as well, that is, the reduction of resistance to change. Otherwise, the chances of successful long-term changes may be affected by further reactions of opposition of the employees.

Conclusions

After more research of organizational change models, we have reached the following conclusions:

- not all models of organizational change present reducing resistance to change as a necessary stage;
- the place of this phase in the models of organizational change is not considered to be the same;

- some models of organizational change recommend indirectly reducing employee resistance to change by indicating the use of some methods, techniques, processes that would lead to this result. Here we include mainly: communication, training, positive motivation of employees;
- we recommended that the place of this stage should vary depending on the desired change to achieve;
- in strategic changes, which are extremely important for an organization and which affect a large number of employees, we recommend that the reduction of the employee resistance to change be achieved before passing to the implementation of the plan developed to implement the change;
- in imposed changes, in conditions of crisis when we have no time available to plan the change, immediately after it had been implemented it is necessary to conduct effective actions meant to ensure, even if the change has been made, the reduction of the resistance to change of the affected employees
- to achieve time savings in the process of organizational change, we recommend that after having obtained a certain attachment of some employees to change, the implementation of the methods, of the techniques that would increase their commitment to continue to be developed in parallel with the implementation of the change.

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MANAGEMENT, COMPETITIVENESS AND BUSINESS HIGHER EDUCATION

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What is competitiveness – a performance result or a driver of future performance? Competitiveness is both a result and a cause and therefore it is a controversial issue that requires continuous investigations to consider the permanent dynamics of the involved variables. Organizational competitiveness is influenced by a multitude of factors. Some of the variables are not controllable, yet others may be influenced as well. The most important example is the managerial system, which is a complex, yet controllable variable.

This paper aims to propose a conceptual model to analyze the relationship between management and organizational competitiveness. The major factors presented and directions for future research are suggested according to the proposed model containing a series of dependence and inter-dependence relationships that were empirically tested. Our results are based on processing information after applying a questionnaire to organizations of different scales and from different fields of activity in two periods of time, in order to see the causal relationships and the transformations over time. The general model was actually developed in an initial form by one of the authors in her PhD. research and is further developed in this paper, by following a multidisciplinary approach and by taking into account many aspects developed by different specialists in the field of organizations' competitiveness.

This paper also aims to propose a series of specific analysis areas in the field of business higher education, by having as a starting point our proposed general model of competitiveness. The implications should be a better scientific management and future organizational performance of business higher education institutions and a better quality of the educational process that should really meet customers' needs and should lead to a better performance of the economy as a whole. The authors' main contributions refer to the development of the general strategic model of competitiveness and the ideas for specifically applying it in the field of business higher education.

Keywords: competitiveness, management, strategy, dynamics, business higher education

JEL classification: I21, I23, L14, L21, L25, M10, M16

Introduction

Competitiveness is a broad topic with a set of theories we consider to be both interesting and complementary; however, we do believe these theories can be developed furthermore.

There are many definitions that complement each other. We define competitiveness as *the capability to successfully compete, to provide products and services as or more effectively and efficiently than relevant competitors for a specific time frame* (Radu and Grigore, 2010).

Competitiveness is clearly a time-dependent structure (a currently competitive organization is not necessarily competitive in the future).

In order to analyze the evolution of organization's competitiveness from a time frame t_0 to a time frame t_1 , we disagree with the resource-based theory, because, assuming that two organizations dispose of exactly the same resources (practically impossible, yet still assuming that), we can notice that one of them is better than the other. We want to underline the importance of strategic use of resources rather than the resource by itself. This idea has a series of similarities with competence-based competitiveness (Hamel and Prahalad, 1994).

It is clear the need for a causal model. It is not easy to build such a model, and perhaps the highest difficulty comes from the fact that we generally consider competitiveness is just an effect ("organization X is competitive, while Y is not" and we can explain which should be the causes that led to a competitive organization and, respectively, to an uncompetitive one). However, competitiveness is not only an effect, it is also a cause.

The biggest challenge is measuring the dynamic competitiveness. If two organizations have at a specific moment in time approximately the same level of competitiveness (measured on a particular scale), their actions will make the difference for the future (competitiveness as a cause or determinant is the same for the two organizations, but competitiveness as a result is different). Strategies should be dynamic, as there are always unpredictable changes in organizations' external environment. It is clear that dynamic strategies require consistent compromise between the economic logic of low cost and the one of differentiation as main factors of strategy. However, dynamic competition is a constant challenge for organizations to continuously improve their actions on the market and often to strive for rewriting the rules (Carpenter and Sanders, 2007).

Competitiveness and sustained competitive advantage – Literature review

Organizations face many problems, two of them having a really high impact: (1) how to grow a business, and (2) how to ensure that the growth helps the organization become sustainable over the time (Rieley, 2006).

In order to have a good vision regarding a company's future, a careful analysis of the whole system a company is part of and the ability of the company to achieve future growth are clearly necessary (Woodhead and McCuish, 2003). It is clear that current competitive position and potential influence the future level through company's current responses (actions). However, an incorrect assessment of the current situation may lead to two errors: an under-response (in terms of relative competitive force) should result in deteriorating relative competitive position; the over-response is also a problem, as it can result in wasted resources with little gain in advantage (Oliva, Day and Macmillan, 1988).

A company's long term adaptation is actually produced by a series of strategic behaviors and organizational innovations. Therefore the organization's capability to develop effective strategic behaviors and organizational structure is critical for any company's growth (Kuwada, 1998).

Strategic decision speed is very important; it matters for companies' growth (competitiveness as a result). Therefore, companies need to master fast decision-making (Baum and Wally, 2003).

Most specialists believe competitive advantage is the base for attaining competitiveness. Competitive advantage reflects the relative position of an organization compared to positions of industry rivals (Carpenter and Sanders, 2007).

By taking into account the way competitive advantage is attained, organizations try to find an appropriate position (Porter, 1998). According to Porter, there are two essential sources of competitive advantage: having a lower cost structure than competitors or having a product of which customers believe it is different from other products. The main drivers for a low-cost strategy are: economies of scale, learning, economies of scope, superior technology or superior

product design. However, low-cost strategy will have to oppose to a series of threats: development of new technologies, inferior quality, risks associated to outsourcing (as this is a large-scale approach in order to cut costs). The main drivers for a differentiation strategy are: a premium brand image, customization, unique styling, speed, convenient access and a high level of quality. Of course, this strategy will also have to face a series of threats: buyers' unwillingness to pay higher prices, underestimating costs of differentiation, over fulfilling buyers' needs, low-cost imitation.

Sustained competitive advantage usually originates in a core competence (Hamel and Prahalad, 1994), which is anything from product development to employee dedication.

The activities of strategic management are based on the assumption that organizations attempt to achieve a position of competitive advantage over their competitors when serving target customers. An organization really benefits from competitive advantage when it implements a strategy that creates value and that is not adopted also by a current or potential competitor and when competitors are not capable of benefiting from the advantages of this strategy (Barney, 1991). The same author insists over the criteria that resources have to meet in order for the organization to benefit from a sustained competitive advantage (the VRINE model):

- *Valuable resources*. The resource or capability should allow the organization to meet a market demand or protect it from market uncertainties. A resource is valuable if it enables an organization to better benefit from opportunities and face the threats. However, value by itself does not guarantee the advantage. For profit organizations, the normal performance implication consists of normal profits, yet abusing a valuable resource can also lead to higher costs.

- *Rare resources*. Valuable resources that are also rare (scarce relative to demand) clearly contributes to a competitive advantage but not necessarily for a long-term one.

- *Inimitable and/or nonsubstitutable*. It is clear that a valuable and rare resource is not an advantage if competitors gain possession of it or find a good substitute. Only valuable and rare resources that are also hard to imitate or substitute can contribute to sustained competitive advantage. Property rights are the most straightforward cause of difficulties in trying to imitate or substitute.

- *Exploitable resources*. It is clear that, without meeting this last criterion, the others cannot lead to a real competitive advantage. An organization should be able to exploit its resources, to get the value out of any resource or capability that it may generate.

VRINE analysis can be a useful tool for managers interested to systematically test the importance of particular resources and capabilities and the desirability of acquiring new resources and capabilities (Carpenter and Sanders, 2007).

Conceptual framework – Towards an integrative competitiveness model

Our proposed model is based on the hypothesis that an organization's level of competitiveness at moment N+1 is certainly influenced by the organization's level of competitiveness at moment N (as stated in the resource-based theory). However, a very high level of competitiveness at moment N does not necessarily lead to very good results also for the moment N+1, as between the two moments there is a transformation process that depends in its turn on several factors.

The model we propose is a dynamic perspective on competitiveness. The basic idea from which we started to build this model is that future level of competitiveness is a result variable that depends on a series of independent variables: current level of competitiveness, organization's current actions (which are strongly related to current level of competitiveness and also depend on competitiveness' potential, on leadership, on organization's competences and on external environment), current actions of key competitors, leadership, organization's competences and the whole external environment. Future level of competitiveness is the result of a transformation process that takes place depending on all the factors mentioned above.

The transformation process deserves a special attention, as, if carried without care, will negatively affect the organization’s level of competitiveness. According to some authors (Bjelland and Chapman Wood, 2008), there are five distinct, reproducible ways of radically altering organizations: the standard model process (“holism”), transformation through the ambidextrous form, transformation through acquisition/restructuring, the Collins “Good-to-great” process, and improvisational transformation process. And there are also the hybrid approaches, which are mixtures between them. Of course, we should not necessarily look for radical changes, although a significant improvement in the level of competitiveness very often requires this. Some change is always necessary and should be implemented. It is true, yet, as Collins and Porras remarked, we cannot omit the fact that continuity is also important (Collins and Porras, 2002). It is absolutely essential not to confound the fundamental vision with strategies, culture, tactics, operations or other unfundamental practices.

Briefly, our proposed model can be seen in the following figure:

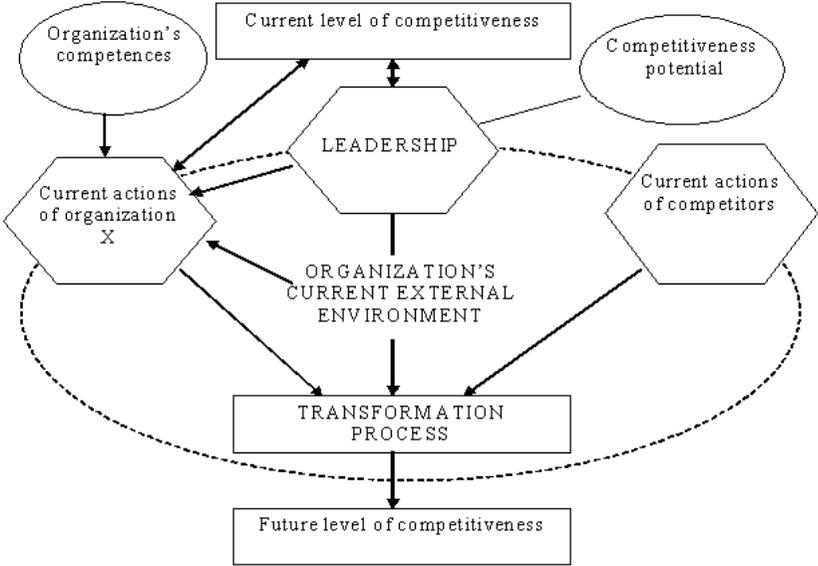


Figure 1. Organization’s competitiveness in dynamics

Leadership development plays a very important role in the process of organizational transformation that explains the shift from a competitive level to another one. Leadership is seen as “the process of influencing the activities of a person or group of people in order to achieve the organization’s objectives (Ursachi, 2005). Organization’s leaders should be managers and not other people, in order not to lead to organizational conflicts. Obviously, this condition is not always met.

The considerable impact of leadership on organizations’ performance is clear, for instance, in Six Sigma. Six Sigma can be considered, among others, a model of leadership, whereas commitment of business leaders is essential in order for Six Sigma initiatives not to disappear too quickly (Pande, Neuman and Cavanagh, 2000).

In this model current competences are an independent variable affecting organization’s current actions of the organization and thus its future level of competitiveness.

From the perspective of strategic management, Hitt, Ireland and Hoskisson (2005) define competences as a combination of resources and capabilities.

Hamel and Prahalad (1990) considered core competences to be portals to future opportunities. A core competence consists of a range of skills and technologies that mean an advantage for the organization from a significant point of view of its customers (Hamel and Prahalad, 1994).

In building the model, the external environment was a pretty big challenge, for several reasons. Firstly, it is clear that it is a very important variable to be considered (as the organization is an open system). Secondly, it is a complex variable (which takes into account many different factors). Thirdly, the main problem this variable creates refers to the fact that it is not exactly an independent variable in this model. Causal relationship between the variables “external environment” and “current actions of the organization” can be considered of a dual implication (interdependence), whereas not only the environment influences the actions of the organization, but also vice versa. However, in the model current external environment is an independent variable. Future external environment is a result of the transformation process and it was not subject of the study.

Research methodology and main findings

In order to test our hypothesis, we developed a questionnaire that was applied in two periods of time (June – September 2007 and June – September 2009), in order to see the causal relationships and the transformations over time.

223 questionnaires were distributed to managers of different Romanian organizations (7 of them non-profit organizations, the rest of them companies of different scales and from different fields of activity). Our final analysis was limited to 98 organizations.

In practice, when we analyze competitiveness dynamically, we refer less to specific strengths or weaknesses, and more to “a potential of competitiveness”, a response capacity and adaptation to various evolutions in the environment in which a company activates (Radu, Grigore and Cătăneț, 2009). The difficulty of dynamical analysis consists of the variable certainty of the predictions (regarding the environment), as well as the difficulty of obtaining relevant information, which many times happens to be confidential. However, the potential of competitiveness may be analyzed in dynamics, by using an extended Porter’s model in dynamics (Radu, Grigore and Cătăneț, 2009), a dynamic analysis of the five competitive forces and of the macro-environment. The idea is to identify the organization’s responses to the main evolution trends regarding competition, potential competitors, substitute products, customers, suppliers and general environment.

After processing the completed questionnaires we analyzed the average scores for each company regarding the variables included in our model. Therefore we could analyze the distribution of results and also to perform a regression analysis in order to test our hypothesis. The interdependence relationships were confirmed by the Pearson coefficient of correlation. The dependence relationships were validated after performing the regression analyses.

It was not easy at all to evaluate organizations’ current actions, strategic and tactical movements. Respondents to our questionnaire would not have answered to specific questions (or perhaps they would have answered, but not sincerely). However, we understood that the main points to be attained refer to cost, time and quality in an extended view (Radu, 2009) and these aspects could be pursued in our questionnaire. With respect to cost, we were particularly interested in analyzing the cost of actions seen as use of resources and tendencies towards outsourcing or not non-core activities. With respect to time, we followed to rapidity of organizations in adapting to various new conditions (flexibility). Last but not least, with respect to quality, we looked for organizations’ focus on customer.

Business higher education and future development of our model

We intend to apply our model for a specific field of activity – business higher education. We intend to make a comparative European analysis, by emphasizing a series of elements: (1) customers' demands; (2) teaching activities; (3) research activities; (4) mobility programs; (5) macro-environment factors. We are at the beginning with this second research for which we applied a questionnaire to students and graduates of Academy of Economic Studies, Bucharest (pilot study). We used the online platform SurveyConsole in order to determine our students' perceptions with respect to the educational process – we were particularly interested in aspects such as case studies, teamwork and online education. Up to now we have 236 respondents.

There are many important issues to be analyzed, some of the most important being the following:

1. For organizations – what positioning is required in order to benefit from as many network resources as possible (at international, national or regional level) and in order to be competitive?
2. For employees (professors) – how can they reach an equilibrium between teaching and research processes, on the one hand, and between excellence in teaching and relevance in real world, on the other hand, as competitiveness does not need to be measured only in the traditional way, strictly from the academic point of view?
3. Who are the “real” customers? Students or companies?
4. For students – how can they find the best conditions for the educational process, that should be both able to satisfy the individual needs and aspirations and to have acceptable costs?
5. For companies – what are their interests?
6. How could we apply the “value innovation” (concept discussed in “Blue ocean strategy”, by Kim and Mauborgne, 2005)?
7. What are the adaptations needed for having a particular competitiveness model in this field by having as a starting point the general competitiveness model? For example, university's capability to attract funds is a very important result of partnerships with companies as part of the “external environment”, while the university's image (partnerships between academicians and universities, for instance) is certainly an important aspect of the “potential of competitiveness”.

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THE INTENSIFICATION OF THE MOTIVATIONAL CHARACTER OF SMES MANAGEMENT

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Irrespective of their size, all the companies in Romania face deficiencies in the motivation of the staff, situation leading to the employees' dissatisfactions in work, their instability, the lack of interest of employees in the performance of the organization.

An effective motivational system is the one bringing satisfaction in work to the staff. The satisfaction in work is the state of balance that the individual reaches when he/she answers completely some aware or unaware needs or expectations.

The new vision in the field of human resources is that managers should have in their suborder self-motivated working teams, who, with a little supervision, can put into effect the goals established. In this case, the managers have only the supporting role, granting consultancy to the members of the team and providing the interface of the team with the exterior. As for the rest, the team members do it all, from the establishment of the objectives to accomplish to their achievement. The concept of motivation approaches aspects that make people work better and more; that they should be perseverant and to go over obstacles; that they should be committed to work and enthusiastic with respect to the activity they carry out. A component of the managerial role is that of providing people with motivations, making them be committed to their work, but the success will be unlikely if we do not fully understand what people want from their job.

Key words: reengineering, human resource, motivational management, motivational scale

1. Trends in the motivation of human resources in SMEs

Although, for several decades, no one has challenged the importance and major implications of an adequate motivation of the staff, the progresses at this level have been relatively slow. Hardly in the last decade, in the management practice, has a substantial change in the direction of a complex and effective motivation of the staff occurred.

Therefore, the motivational management crystallised, which is based on decisions and actions which consider, at a high level and on a permanent basis, resorting to evolved concepts, modalities and techniques, the interests of the company's employees and the other stakeholders, with a direct reflection in the increase of the potential and performances of the organization.

At the delineation of this mutation, several factors have contributed starting with the modification of the conception of management on the human nature, which started to be approached in its complexity considering the multiple qualities and roles that it has in the enterprise, the society and the family. The employee is approached in the context of the organisational culture and climate, which allows a more profound and more complete understanding of its interests, aspirations and behaviour. A substantial contribution in the interpretation and popularisation of the complex human nature and the need to take it into account in the conception and accomplishment of the activities within the companies was brought by the representatives of the behavioural school. Mayo, Maslow, McGregor, Crozier, Lickert are only a part of the scientists whose theoretical and methodological contributions have especially been noteworthy on this plan.

Another main means of operationalizing the company's flexibility consists in reengineering. Currently of great contemporaneousness – especially as a result of the successful book of M.

Hammer, J. Champy “Reengineering the Corporation” – although its name is conceived by certain specialists in the field, reengineering is more and more frequently invoked as a major means of flexibilisation and modernisation of management. In the conception of the authors quoted, reengineering consists in the fundamental rethinking and radical redesigning of the economical processes in order to accomplish major improvements aiming at the performances regarding the costs, quality, service and rhythm. In a very systematic approach, the Israeli professor Ronen shows that in essence, reengineering requires the reconstruction of the company by catering on the client, cutting down the average management echelon and by cutting down control and coordination. This involves essential changes in the economic fundamentals of the company, concentrating on the processes within, remodelling them, persistently pursuing top performances.

A second major cause of diversification and intensification of the staff motivation in enterprises consists in discovering its multidimensional nature. As a result of the research carried out, several motivational scales have been identified, of which the most known is the one conceived by Maslow. He established that there are five main categories of needs, the satisfaction of which has a motivational effect, namely:

- Elementary physiological needs of nourishment, clothing, shelter etc.;
- Needs of personal security and safety;
- Needs of human contacts and affiliation to the group;
- Needs of social status and esteem;
- Needs of self-fulfilment

As it results from chart no. 1, the satisfaction of the first four categories of needs up to a certain level also attracts an increase of the motivation of that person, then it is gradually diminished. The only category of needs, the satisfaction of which at an upper level corresponds to an increase of motivation, as there is no threshold, consists in the needs of self-fulfilment.

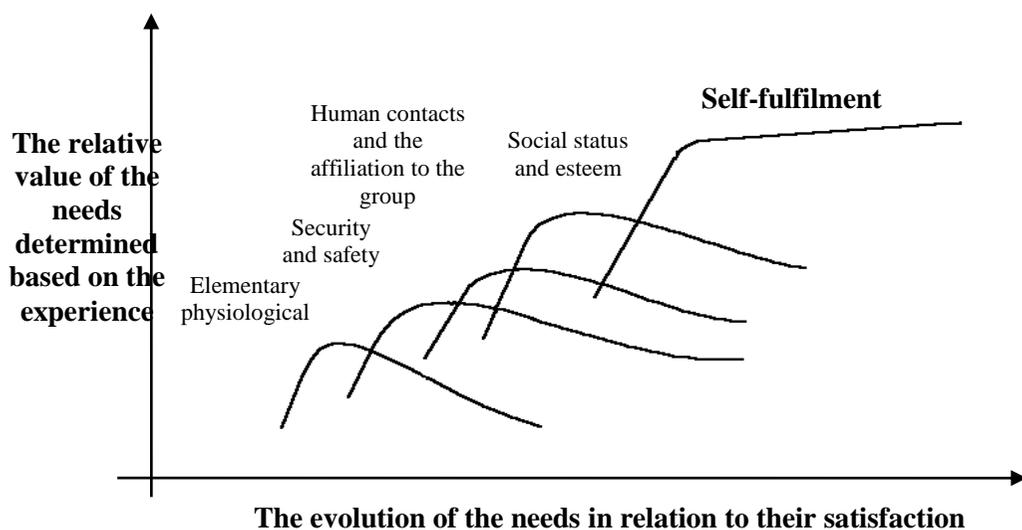


Chart 1. Maslow's motivational scale

At the re-evaluation of the importance of motivation and upon its acknowledgment in a plenary way, a substantial contribution consisted in proving the tight relationship between the motivation of the staff and the results obtained. As argued in a specialised paper, frequently quoted by the specialists, the pivotal role within any organization is played by people, representing a more important asset than the other ones. At the same time, it is considered that the human resource

presents a great strategic value. The increase in the efficiency of staff work, as a result of the intensification of their motivation and vice versa, eventually consisted in the most convincing argument for the management members of the enterprises, in order to approach and use the motivation in all its complexity. The contingency approach is an eloquent proof at this level.

Along with these causes, reflecting especially the evolution in the field of theory of management, a major role in the intensification of staff motivation was by the occurrence of dysfunctionalities in the companies, which could not be solved without changes in the means, methods and techniques of motivation. Among them, we mention resistance to changes of part of the staff, the insufficient creative participation in the accomplishment comprised in the plans and programs, the use of ineffective management behaviours, and so on. Regarding the last aspect, the research carried out on a sample of 1600 people in the Western Electric company for three years, showed that the hostility towards the subordinated people present in the behaviour of some leaders (called type A behaviour), based on the belief that you cannot work with and motivate them by being polite and nice to them, is directly correlated to the frequency of heart diseases in them.

Conclusions

The motivational management determines important positive effects within the organization:

- it contributes to the development of a frame of mind in the staff and of an organisational culture favourable for making efforts and obtaining the performance by the organisation;
- it amplifies the leadership of all the categories of managers, the upper motivation of the employees for assuming and carrying out the tasks, encouraging the formation of team spirit and increasing the audience that the managers have in their subordinated staff as well as their receptivity towards the decisions and actions of the supervisors;
- it determines the intensification of the work both at the level of the management members and at the level of the execution staff, against a sensibly larger participation of them in the initiation, preparation and execution of the actions requested by the operationalization of the company strategy and policies;
- substantially raises the productivity of the physical and intellectual work of the staff, the quality of products and services, which reflects directly and positively on the economical results of the company (turnover, costs, profits etc.)

The exploitation of the potential advantages of the motivation pointed in the previous paragraphs is affected by several limits manifested with a high frequency within the organisations.

A notable part of the managerial staff in the companies does not have enough qualities and motivational availabilities, resulting in major deficiencies at this level. Moreover, even the talented and well-prepared managers find it extremely difficult in noticing and considering the multiple human and organisational aspects of the motivational decisions and actions. At last, a final limit resides in the limited financial resources of the companies, often insufficient for supplying at the optimal level the income bonuses that the intensification of motivation assumes.

The organisations that have a real motivational management are the ones that have succeeded in exploiting at an appreciable level their multiple advantages and to counter-balance sensibly the inherent limits associated to them.

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METHODS OF IDENTIFICATION OF THE NEED FOR ORGANIZATIONAL CHANGE AS BEING OPPORTUNE

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Given that the world is constantly changing and the speed at which these changes occur is very fast, it's vital that organizations understand the necessity and opportunity of change, before their results or performance start to decrease. Although we always hear everybody speaking about change, this concept still raises many questions and problems, and the managers have difficulties on identifying what changes should be made in their organizations, in developing an action plan to achieve change and to manage the entire process of change. Without changing and without always adapting to new market requirements, which as a result of the process of globalization includes not only the local market but also the international one, organizations will not survive and will not be effective and efficient in order to achieve performance.

The purpose of this paper is to highlight the importance of the opportune identification of changes in order to reach the success of any organization by presenting how to recognize them by managers or by owners in order to manage efficiently the scarce resources and achieve better long term results. To identify the need for change as being opportune is recommended an environmental analysis based on internal and external factors, to see the influence that they show so that the organization could achieve those reactive changes, which consist in adapting to the environment, or contrary to promote proactive changes that make the organization to influence the environment and not vice versa.

No matter what kind of change takes place in an organization is important to note that it needs to attract with it an improvement, so that top managers, who have a much clearer vision of the organization as a whole, must promote only those changes that lead to better results than those recorded before starting the process of change.

Key words: organizational change, opportunity of the need of change, change process, internal factors, external factors

JEL Classification: M10

The opportunity of the need of change

The release of the process of organizational change occurs when managers or owners of an organization identify the existence of opportunities leading to improved business processes, or when things go bad and there are various problems in the organization.

In the first case in which the change comes after the identification of possible ways to improve the activities of the company, whether it is the whole organization, or just a specific department or group of people, we are talking about proactive change through which the organization is trying to influence the environment in which it operates.

The proactive change is the surest and the most rapid path to success, progress and performance, but at the same time the most difficult because not all managers are willing to create and innovate when things in the organizations that they manage go well.

Thereby the most important role in making proactive changes is accomplished by top managers or owners of the organization that by launching a new product or designing a new manufacturing technology are able to generate changes in consumer behavior and able to achieve a competitive advantage over competitors.

The second situation in which the change takes place is also the most common in practice, the majority of managers calling to change only when things go wrong in their organizations or show signs of worsening.

In this case we are speaking about the reactive change that helps the organization to adapt to the influence of the environment, due to increased competition, depletion of resources, technological development, etc.

The problem that occurs in this case is that managers often don't have enough time to implement such a change, because they are frequently hit by the resistance of employees, so the results obtained after the change are not the best.

Depending on the seriousness of the situation and the speed with which events took place outside the company, managers must identify the most appropriate changes for their organizations and act swiftly and decisively, even if sometimes it means creating a state of tension and uncertainty within the organization. Once the crisis is resolved, it is recommended that the initiators of the change explain to those affected by that change, why such drastic measures were taken in such a very short time, in order to gain their confidence and make them feel comfortable with the change, thus reducing any form of resistance.

To identify the need for change as being opportune managers should carefully consider the internal and external environment of the organization and to form a more realistic view of the influences manifested by it, because as Rosabeth Moss Kanter stated, *"Organizational change is not stimulated by pressure from the environment, resulting in a set of problems that trigger an automatic reply, but the perception of key actors on the environment."*

Methods of identification of the need for organizational change as being opportune

There are many cases where even though the environment has expressed strong influence on organizations, they had no response because their managers did not know how to identify those reactive changes.

Whether we talk about proactive or reactive changes, it is important to emphasize that a change needs to attract with it an improvement, so that managers must answer three basic questions before starting any process of change:

- What to change?
- When to change?
- How to change?

What to change?

To answer this question managers can call upon a consulting firm or they can find the answer themselves together with their employees.

If calling for a consulting firm managers can obtain an opinion from specialists with relevant experience who have an accurate perception on the environment but the associated costs will be significant.

If the organization has the necessary resources, it is recommended for managers and employees to find answers to this question, based on identifying the factors that generate change, the analysis of their mechanism of action, the current state of the organization and future influences manifested by the environment.

When to change?

The answer to this question is very simple: as soon as possible!

Once the managers have found the answer to the first question "what to change" they should take those actions to implement the changes as quickly as possible, but not before considering whether they are indeed appropriate and realistic, with visible results.

The actions to be undertaken will be part of an action plan that aims to show how the change will be made, a detailed description of each action, their sequence in time, the responsible persons, the resources and the outcomes.

How to change?

In order to answer this question many models of organizational change were developed, one of them belonging to the German psychologist Kurt Lewin, who argues that organizational change involves three steps:

1. Unfreeze

This is probably the most important step because it refers to how organizations are preparing for change, identifying the pros and cons and the motivation to go further.

2. Change

Change is not an event but a process, so this stage corresponds to a state of transition from the initial state to the future one where changes have occurred. Here takes place the implementation of the action plan and the reduction of the resistance manifested by the organization's employees.

3. Freeze (or refreeze)

After the change occurred and reached the required status, new processes, behaviors and attitudes should be made permanent so that desired results are achieved and the progress is recorded.

Factors that generate the need for change

The need for change is generated by the action of internal and external environment, characterized by a number of factors that affect differently the organizations, depending on the specifics of their business, their size, their organizational culture, etc.

In the category of the internal factors that may cause the need for change we have:

- *the company's employees*, who often have a hostile attitude towards change and show resistance especially because they are not consulted regarding this process, so it is important that the initiators of change clearly explain why change is beneficial to the organization and try to involve them as much as possible;

- *the organizational structure*, the more rigid, the more the power is centralized and does not apply the principle of delegation and there are many rules, procedures and regulations, the more difficult is to change. An organic type structure, which focuses on delegation, experience and informal relationships allows an easier implementation of the changes, considering them appropriate and even necessary;

- *the informational system*, the efficient movement of accurate, complete and timely information promotes the change because each member can form an accurate picture of the existing problems in the organization, identifying the opportune changes to address those issues;

- *the quality of management*, decisions taken in the organization can foster a change process if managers have a favorable attitude toward change, the practiced style of management could also encourage creativity so the change as well - in the case of democratic and consultative management, or rather can lead to coercion - autocratic management. The manager's decisions also affect the organization's strategy which can also lead to a series of changes or limit their number;

- *the organizational culture*, is the most difficult variable that can be changed so where there is a pro change culture within the organization, the resistance manifested by members will be much reduced or even zero, which will identify the need for change as being appropriate.

External factors are different and generally include:

- *economic factors*;

They can include the internal and international market, the purchasing power of consumers, the degree of economic development, the infrastructure etc.

These factors show a significant influence because the changes made by firms, particularly those related to upgrade its product mix, primarily depend on current market demand and consumer purchasing power, in condition of the intensification of competition. The development of the economy has a direct impact on imports and exports, infrastructure, on the financial potential and on investments. Organizations operating in highly developed countries are able to identify more quickly the opportunities and have many available resources, unlike other less efficient economies organizations.

For many of the factors included in this category, organizations can adopt only reactive changes, but there are also cases in which they can promote proactive changes, especially when it comes to creating certain needs through the launch of revolutionary products that lead to increased exports, and hence demand.

- *political factors*;

The policy of a country can attract foreign investors and facilitate cooperation with other international bodies, which will lead to some major changes as a result of increased competition and alignment of the directives and legislation of those bodies.

When it comes to these factors, organizations can generally perform only those reactive changes, without being able to express any influence.

- *legislative factors*;

These factors are closely related to the political ones and generally include all laws, ordinances, resolutions, etc. within a country. The organizations are obliged to respect the law of the country where they operate and to pay some taxes, contributions, most of them being unfavorable, so the smallest legislative change attracts itself a number of changes in firms. To deal with all the legislative changes, it is necessary a correct and complete information so that organizations can benefit from certain facilities and programs that support business development. Just as in the case of political factors, organizations have little influence over legislative factors, resulted in changes made by adopting a reactive behavior.

- *technical and technological factors*;

In this category we have: the technical level of equipment available on the market, the number of licenses, patents, trademarks, know-how. The technological changes are probably the most frequently encountered and their pace is very fast due to continues fights that organizations have in order to achieve a sustainable competitive advantage that ensures customer loyalty, market share growth, sales and profits. Without change, innovation and updating the technologies they use, organizations can't keep up with what is happening on the market and will not become effective. An up-to-date technology allows the costs reduction and better use of resources leading to increased performance.

Adapting to existing technology requires a continuous reactive behavior, but if we talk about proactive change, the organizations that are investing large sums of money in research and development to develop new technologies, in order to use or sell them to other interested organizations, have a much higher performance and profit because they are able to identify and use the opportunities offered by science.

- *management factors*;

National economic strategy, mechanisms for coordination and control of firms, methods and management science techniques have also an important role in making changes because organizations must comply with certain rules and principles for organizing and their managers should be open regarding the application of methods that provide effective leadership, with visible results.

- *socio-cultural factors*;

Socio-cultural factors including customs, mentality, tradition, health care, culture, science and education also induce some changes in terms of employee attitudes toward work, the staff's

degree of specialization and even on the products offered by companies as a result of the change in consumer's preferences and behavior.

- *demographic factors*;

The population number, its structure by age, sex, occupation, rural and urban areas, life expectancy, population growth, influence organizations that according to their field of activity, location and size are forced to do a number of changes to adapt to the specific area that they operate, because each market segment has different needs and requirements, so the standardization of products and services is not always recommended. Another issue that organizations must take into account is the degree of expertise and skills existing within a given region to assess whether certain changes are necessary in this regard (for example retraining).

- *ecological factors*;

Organic or natural factors are represented by water, soil, subsoil, vegetation and climate. Environmental protection is increasingly important given that the world's population is more numerous, and the degree of pollution is increasing, so the organizations are required to make those changes that lead to reducing carbon emissions, waste resulted after the process of production and increasing recycling.

More and more organizations adopt a policy on social responsibility and sustainable development, making major investments that lead to changes in terms of manufacturing technology, used materials, production processes, etc.

Another problem relates to the scarcity of natural resources that also require changes and investments in research in order to identify alternative sources of energy or materials to replace some scarce resource.

In order to identify correctly the influences of these factors, organizations have various tools that allow a thorough review of the status and future trends, the most commonly used being the SWOT analysis. This allows the identification of weaknesses and strengths from the internal environment and extends to an external environment analysis, identifying key opportunities and threats.

Due to the ease with which it can be applied many managers resort to such an analysis to identify necessary changes to ensure the transformation of weaknesses into strengths by using existing opportunities from the external environment, or to strengthen those strengths in order to maintain the competitive advantage.

Conclusions

The need for change must be associated primarily with the need for survival and later with the organization's efficiency and competitiveness because there is a direct relationship between the two so without awareness of the need for change, managers can not ensure long-term maintenance of the organization's results and much less won't be able to ensure their growth, and this will lead to regress and even bankruptcy.

Identifying the need for change as being appropriate for the organization depends primarily on the interest shown by managers, who on the basis of information obtained from a diagnosis of the environment, must take the necessary measures to conduct the change process. There are many cases in which managers are not interested in change, mainly because there are no problems in their organizations, and the results are good, but as we previously stated the change should not be a result of deficiencies in the implementation of business processes. Another situation is where managers are overwhelmed by the speed of changes taking place around them and abandon the idea of change, motivating this by the fact that even if they would change anything, this effort will be in vain because the necessary time for a change is usually longer, or because they don't have resources.

Both cases correspond to a passive behavior that leads to a negative attitude of strong resistance to change.

Whatever justification is found, the fact is that without an adaptation to change, an organization won't be able to survive and to expand, so it is essential for any manager to identify on time the need for change that will lead to the success of his business.

The method of identifying the need of change as being opportune is the environment's analysis that allows a clear down of the current situation of the organization and allows identifying the necessary steps that have to be followed in order to make the changes that will lead to performance.

Not all factors manifest their influence with the same intensity, so it is important for managers to first identify those key factors, with the highest power of action and then to focus their attention on factors less influential.

The potential changes identified from this analysis must be carefully studied and correlated with the resources and the particularities of the organization, establishing a hierarchy and then move on to their implementation because of the quality of this stage is depending the success of the organizational change process.

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EXPLANATORY ECONOMETRIC METHOD FOR THE ANALYSIS OF THE BEHAVIOR MANAGEMENT IN ORGANIZATIONS IN ROMANIA - GUIDE FOR DEVELOPING THE PILOT STUDY

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Our paper, entitled "Explanatory Econometric Method for the Analysis of the Behaviour Management in Organizations in Romania" reflects the wide opening of econometric modelling to quantify the Romanian management issues, representing a practical guidance on multiple recovery plans to fund the huge data collected as part COMOR project launched by the Scientific Society of Management in Romania to characterize the behaviour of managers in the Romanian economic organizations. Construction of these models offers possibilities for complex analysis, descriptive and factorial sequence of firms, counties, geographical areas, but comprehensive summary of studies on the macroeconomic level. Scientific knowledge through a comprehensive assessment of managerial behaviour in the most representative types of business organizations of all geographical areas of the country are, in the context of globalization, one way to prevent surprises market economy. Thus, the results of this exploratory research will provide economic environment, and not only strong argument for anticipating decisions in order to choose the best economic policies, with beneficial effects as conclusive and with as few undesirable implications. Research based on the opinions of thousands of respondents approved, processed through a variety of instruments subject of extensive econometric and interdisciplinary interpretation, psycho-socio-economic management, is a modest contribution to the affirmation of local scientific research that aim for theoretical and applied Romanian school of management by defining:

- knowledge of behaviour management in all types of business organizations in Romania;*
- identifying the Romanian space dimensions of organizational culture as a reflection of the peculiarities of national culture and especially of the main ethnic-specific subcultures;*
- profile defining effective manager and leader of excellence in terms of character traits and their behaviour.*

Keywords: econometrics, management, organizational culture, descriptive analysis, factorial analysis.

Coduri JEL: M12

1. Preamble

Without proposes to develop the defining elements of econometrics, the specific features of this scientific field in relation to statistics, mathematical statistics or in the preamble of our approach using econometric method in an exploratory research on behaviour management in large scale economic organizations Romania, makes some-option argument on the use of econometric indicators to quantify the value judgments of various socio-economic variables of our research.

According to this, we refer to adopt the following key behaviours of econometrics, the study undertaken in this specific case, namely:

- factual component that the specific area under investigation is a reality of management processes in a well defined geographical area: economic organizations in Romania as the unit of observation, that respondents from these organizations as units of sampling;
- conceptual component of economic management for the dimensions of organizational culture, specific types of managerial behaviour different subcultures of the Romanian space and effective leader and the typology of excellence;
- logical-formal component that we built quantitative models and rational behaviour on different sides of managerial and calling their methods inferential statistics (theory and theory tests estimate) that draw a general conclusion from the quantitative analysis of several private facts I checked the assumptions made in terms of management theory in general and human resource management theory in particular.

2. The construction of econometric models

Depending on the scale and complexity of research, but also the degree of deepening the analysis, econometric models used in research as set out above as shown in Fig. 1 managerial explanatory models are composed of a more or less complex input variables, a process of transformation of probability distributions mathematically range of views expressed by the exponents, a set of variables leads to the result (the outputs).

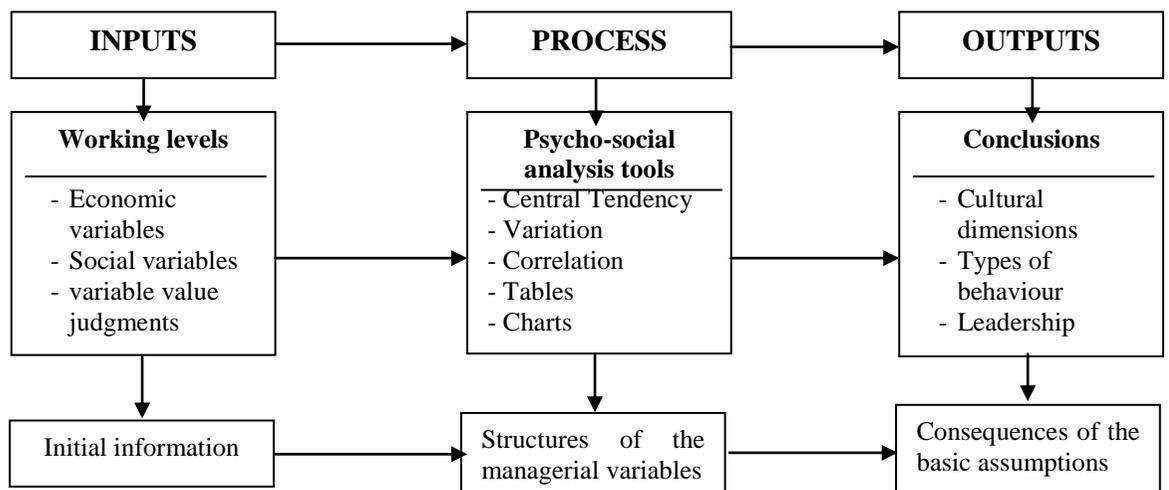


Fig. 1 The systemic structure of the econometric model

Building models based on the initial capitalization of knowledge in the context of econometrics integrated knowledge management and organizational psycho specific limits of investigator.

Assumptions that formed the basis for models reflect the volume and quality of information we had about the reality investigated using the following input variables:

- *economic variables* of the statistical units of observation of the firms: the field of activity according to CAEN code, size of organization based on the number of employees, ownership of equity;
- *social variables* of the statistical unit surveyed (respondents): sex, age, marital status, level of schooling and education in management, the position in the organizational hierarchy (managers, performers);
- *variable value judgments*, those measurable by designating entities beach views expressed, and which were assigned numerical values on the scale from highly positive (strongly agree) to highly negative (disagree).

The information held in the observation data was processed using the managerial structure of the variables of a system of statistical and mathematical indicators consisting of: position indicators (weights), indicators of central tendency (arithmetic mean, median, modulus and asymmetry); indicators of change (amplitude variation, individual deviation, standard deviation, the dispersion, coefficient of variation); indicators correlation (regression coefficient, correlation table, the correlation chart).

The conclusions derived through econometric models are logical consequences of assumptions underlying the inferential analysis process allowed the release of initial information content of their dormant state to highlight the following variables outcome (output):

- dimensions of organizational culture: power distance, individualism-collectivism, masculinity-femininity, uncertainty avoidance, future orientation (long-short);
- types of managerial behaviour: management approach, work style, attitude toward change, policies and practices of motivation, organizational communication procedures and practices, and / or interpersonal, concern for performance;
- behavioural profile of character and effective leader;
- typology of excellence leader.

3. The econometric method, basis for analysis

Ultimately seeking a comprehensive and as accurate characterization of the different structures of management variables, we focused our approach on two lines of analysis: a *quantitative analysis* focused on value judgments, on the one hand by the statistical units of observation (firms), and secondly by statistical sampling units (respondents) and the second direction oriented *qualitative analysis* with indicators of variation and correlation.

The two types of correlation analysis (quantitative and qualitative) we decided to identify and characterize managerial behaviour in key areas of economic activity across different subcultures of the Romanian territory and into the major temperamental traits of different managers and executors geographical areas of the country.

To meet this requirements-goal, we adopted a systemic approach, whereby we develop an analysis stratified by different levels of aggregation (system elements) as follows:

- for large enterprises at the microeconomic level (on request);
- mezo-economic level with aggregated counties, regions and macro-economic development;
- at the macroeconomic level, with conclusions on the national economy.

3.1. Descriptive Analysis

The quantitative analysis (descriptive) was used in structure relative sizes (weights) calculated as percentage ratio to the whole party, namely:

$$p_{\%} = \frac{\text{part}}{\text{whole}} \cdot 100$$

With the help of weights, which are indicators of position, it is argued:

- a) representativeness of the total economic organizations observed, reflecting the domain structure of economic activity (agriculture, mining, manufacturing, construction, transport, trade, etc.), by the degree of size (50-100 employees, 101-250 , 251-500, over 500 employees), by type of capital ownership (public, private);
- b) the reliability of judgments of value (total agreement, partial agreement, indecision, partly disagree, strongly disagree) expressed by respondents in different social variables (gender, age, education, hierarchy within the organization) for each item (question) that characterize a specific variable Managerial dimensions of organizational culture, managerial behaviour, characteristic traits of leadership.

3.2. Factorial Analysis

Unlike the descriptive analysis, in which we used a single indicator, one that characterizes the position of a given quantitative variable (part) throughout the community studied, *the factor analysis* we made use of a true system of indicators with which we managed many sides to put out quality of managerial behaviour in its various aspects.

Without abusing detail on the material we present a brief overview of these indicators, their relationships with computers and how to use the process to review the research, according to the valence of each of them. Thus, the system of indicators that I did not use the factor analysis, is composed of: measures of central tendency, simple indicators of change, synthetic indicators of variation, correlation indicators.

3.2.1. Specification

Before developing each indicator used in factor analysis, we make two methodological notes:

1. Calculating each of the indicators that are part of the groups mentioned above, a process required to convert the numeric expression value judgments on a Likert-type scale. Thus, depending on the range of value judgments provided by the construction of the questionnaire respondents used the primary data collection, conversion was done on 5, 3 or 2 levels, as in the models below:

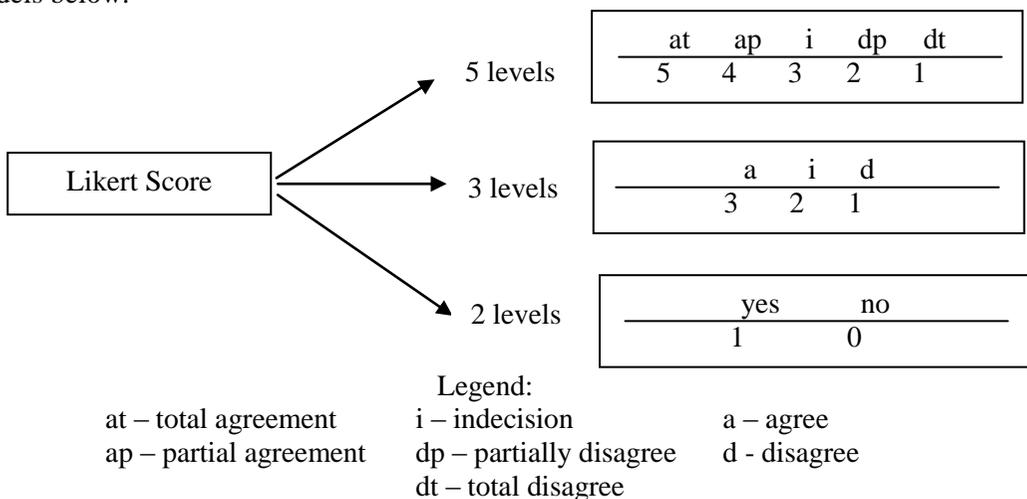


Fig. 2. Model of conversion of opinions to numerical expressions

2. To measure respondents' opinions on a particular variable studied, we started from the premise that people are honest in expressing their beliefs and opinions, however, to arrive at generalized conclusions, we have relied on a single question.

Therefore, for each variable outcome (dimensions of organizational culture, behaviour management, effective leader or typology profile leader of excellence), the questionnaire applied, we have formulated a set of questions that allow us to establish the position of respondents to a variable or another. For example, to measure the cultural dimension "individualism - collectivism" were formulated 16 questions, or to characterize the size of "masculinity - femininity" were used six questions etc.

3.2.2. Indicators of central tendency

From this group of indicators have appealed to the mean, median and dominant module. These indicators, allowed us to put out the essential trends of the variability of responses to the questions in the questionnaire. Thus, **the mean value** (\bar{x}), as a synthetic expression levels of individual value judgments embodied in a single representative level, which highlights the average scores of opinions expressed by respondents to each question in questionnaire responses from the entire range of intensely positive the intensely negative, was calculated as a weighted arithmetic mean formula:

$$\bar{x} = \frac{\sum_{i=1}^n x_i f_i}{\sum_{i=1}^m f_i}, \text{ where :}$$

\bar{x} - means medium value;

x_i - Spectrum opinions expressed on the scale of values (i) from 1-5;

f_i - the number of respondents, m , varying according to the level of aggregation: business, county, region developing, country.

The median (Me) is the average score occupying the central place statistical series ordered in ascending or descending, so the average scores of the series number of values which divides into two equal parts. When the series has an odd number of terms, the median score is given by the rank $\frac{n}{2}$; where the series has an even number of terms, the median is given by the central

terms of simple arithmetic.

Statistics compiled for each question series that helps to characterize a variable result, has different meanings depending on the content and the level at which lies such analysis:

- at the firm level, the series is comprised of average score of the views expressed by each respondent;
- at the county level, the average score is made up of the views expressed by the average sample firm in each county;
- development in the region, the average mean score of opinions expressed by counties comprising the region's development.

At any level of aggregation, median highlights the question that was most meaningful significance to characterize the result of research variable. It is important, in terms of theory, construction of the questionnaire in future research.

Module (Mo) or **dominant frequency** is the value that has score greater.

Is determined using the statistical series as the median scores obtained by highlighting the tendency of respondents to a particular judge stated value of the spectrum: from highly positive to highly negative, and from total acceptance to total rejection.

Asymmetry (As) is the indicator that allows us to know the degree of skew or non symmetry dimensional distribution of symmetry, from the position and values of the indicators of central tendency: mean, median and the module.

Form distribution with left and right asymmetry can be analyzed either by using graphical methods or calculating indicators of asymmetry.

Graphical representation of statistical series provides a suggestive picture of the degree of asymmetry using, on a case by case frequency polygon and histogram.

Indicators of asymmetry are expressed both in absolute size and in relative sizes. Asymmetry is calculated absolute relationship:

$$As = \bar{x} - Mo$$

To make comparisons between statistical series resort to indicators of asymmetry relative. Among them, we stopped at what is called the asymmetry coefficients authors: Pearson and Yule.

Pearson coefficient of asymmetry (Cas) is calculated using the formula:

$$C_{as} = \frac{\bar{x} - Mo}{\sigma}$$

This coefficient can take values between -1 and +1, as the absolute value is less than the Pearson coefficient, the asymmetry is smaller.

The value of this coefficient has the following meanings:

$C_{as} = 0$ symmetry means the terms of the series;

$C_{as} > 0$ distinguish a left skewed distribution;

$C_{as} < 0$ we deal with a distribution skewed to the right.

Yule asymmetry coefficient (C'as) is calculated in cases where we determined the median statistical series (Me), using the formula:

$$C'_{as} = \frac{3(\bar{x} - Me)}{\sigma}$$

Yule coefficient can take values between -3 and + 3 and used when between three measures of central tendency relationship is verified:

$$\text{Module} = \text{Average} - 3 (\text{Average} - \text{Median})$$

Coefficient will show a higher degree of symmetry as will be closer to zero.

3.2.3. Indicators of change

If our research, the value judgments expressed by different respondents, more or less with each other, may be more or less scattered close to the average score, regarded as the most representative value for the research unit (sample taken enrolment).

These indicators allow us to characterize the degree of homogeneity or opinions expressed in the scattering of a social group in general (at the company, county, geographic area, etc..), as well as some of its structures (gender, age, education, hierarchy).

In this group of indicators of change there are two groups: simple indicators of change (amplitude variation, e.g. individual deviations) and synthetic indicators of variation (standard deviation, the dispersion, coefficient of variation).

With these indicators we develop the analysis at different degrees of depth, allowing us to put some light on the qualitative side of the value judgments expressed by respondents.

Amplitude variation (A) is the indicator by which, in-depth analysis, especially analysis of the company or the county, determine the differences between extreme values of the views expressed by respondents. The amplitude of variation is greater, the opinions are different, and vice versa. It is expressed in two forms: absolute amplitude (A_a) and relative amplitude ($A_{\%}$), relationships with the following calculation:

$$A_a = x_{\max} - x_{\min}$$

$$A_{\%} = \frac{A_a}{\bar{x}} \cdot 100 \quad x - \text{represents the opinions score; } \bar{x} - \text{means value scores}$$

Individual deviations (d_i) are calculated as the difference between each variation recorded (score value judgments) and their arithmetic means (average score), using equations:

$$d_a = x_i - \bar{x} \text{ for individual absolute deviations; } d\% = \frac{d_a}{\bar{x}} \cdot 100 \text{ for individual absolute deviations}$$

It is mainly used in the analysis at the firm level, and only exceptionally in the county.

Standard deviation, standard deviation or standard deviation (σ) is calculated as the average squared deviations of the score recorded for each item determined opinions characterizing variable outcome (dimensions of organizational culture, behaviour management, etc.) from their arithmetic mean. To this end we used the relationship:

$$\sigma = \sqrt{\frac{\sum_{i=1}^n (x_i - \bar{x})^2 f_i}{\sum f_i}}$$

Thus, using this indicator consider how the respondents opinions vary on the scale of value judgments (from *at* to *dt*) calculated from the average of each variable result.

Example:

Variable result sought: Behaviour managers in different situations.
Faces situational managers:

1. Attitude towards settling tensions/conflict in the workplace.
2. Attitude towards the expression of the performers, opinions about their work address.
3. Attitude towards mistakes by employees during the activities.

Number of statistical units of observation in Suceava County = 15

Number of statistical sampling units (respondents) = 222

Based on data from Appendix 1, Table present standard deviations below the mean score calculated from the views expressed by respondents to characterize both the current state and considered to be normal in the organizations surveyed.

Managers' behaviour in different situational

Analysis indicators	Symbol	Current practice	Desired practice
1. Average value judgments	\bar{x}	3,727	4,183
2. Standard deviation	σ	0,258	0,279

Summary interpretation of these indicators leads to the following conclusions:

1. Almost ¾ of respondents say that current practice managers are interested in maintaining a spirit of understanding and cooperation between employees and are involved as mediators between the parties when there are situations of tension or conflict, are open to collaboration in the team encouraging employee participation in solving practical service problems and is also tolerant of the mistakes they inadvertently committed during the activities.
2. Value judgments expressed by respondents is quite high values clustered around (partly agree to strongly agree).
3. Despite the favourable findings about the behaviour of managers in the three situational instances, the number of respondents who believe it would be better place, is almost 10% higher than the existing situation (83.7% vs. 74.5%).

A hierarchy of employees who desire signifies a strong attachment to the goals of the organization is working is as follows:

- 86.3% (11.8% more than the current situation) believes that managers should make greater use of employee participation with solutions to solve the tasks;
- 89% (8.1% more than the current situation) believes that managers should intervene more effectively and to ease tension or conflict between state employees;
- 75.7% (7.4% more than the current situation) believes that managers should be more sympathetic to unintentional mistakes committed during the activities, especially by young people who need more support to their immediate bosses.

4. Even if the range of value judgments is somewhat higher in practice desired by respondents, (standard deviation 0.279 to 0.258) shows that the average score is 12.2% higher than the current practice, which means that "total agreement", the whole scale of assessment is crucial.

Dispersion or variance σ^2 a variable result is calculated with a simple arithmetic average of the squared terms of statistical series which consists of questions score variable that is characterized by the relationship:

$$\sigma^2 = \frac{\sum_{i=1}^n (x_i - \bar{x})^2}{n}, \text{ where } n \text{ is the number of items that characterize each variable outcome}$$

(dimension of organizational culture, types of managerial behaviour etc.).

The coefficient of variation (v) is the ratio between the average standard deviation and statistical series, and shows us the degree of homogeneity of the collectivity of questions / answers that characterize a variable outcome, using the relation:

$$v = \frac{\sigma}{\bar{x}} \cdot 100$$

The higher the coefficient of variation is close to zero, the variance is lower, so statistical collectivity is more homogeneous and the media has a higher level of significance.

3.2.4. Indicators of correlation

In our research we are dealing with direct factorial correlations, simple linear type, which led us to make use of the following indicators of intensity commensurate factorial causal links between variables symbolized by x_1, x_2, \dots, x_n and the variable outcome or effect variable y symbolized: the correlation table, the graphic method and the regression coefficient.

With the **correlation table** identifies issues such as: the existence and meaning of correlation, the shape and intensity of causal links. Thus, we use the correlation table analysis of causal links between traits of character which designates the profile of the effective leader, the variables x and types of managerial behaviour, the variable result. So, for example, may reveal the correlation between some features of the leader, such as courage, self-confidence, will, its rigor on the one hand, his attitude toward change, on the other side.

Corelograma as a graphic expression of the correlation, is constructed as follows: the abscissa scale is going to represent the values of variable x factorial, and the ordinate y pass variable values result by uniting intersection points of coordinates x, y , is obtained expressing corelograma suggestive correlation that we want to highlight in particular.

Regression coefficient. As a method of econometrics, regression helps to determine the contribution of the factors underlying (causative) effect of variability phenomena. Since in our research are linear causal links, to measure the strength of correlation using linear function of the form:

$$Y_x = a + bx, \text{ where}$$

Yx - are theoretical variables; a - y result variable values are determined outside the influence of variable x factorial;

b - is the regression coefficient;

x - represents the values of x_1, x_2, \dots, x_n factorial of variable x.

The coefficients a and b is determined using ordinary least squares method, using relations:

$a = \bar{y} - \mu_{u(x)}$, where: $\mu_{u(x)}$ represents the first order cantered factor for variable x. It has zero value.

$$b = \frac{\sum xy}{n\sigma_x^2}, \text{ where: } x - x_i \text{ variants are deviations from their average}$$

y - y_i variants are deviations from their average

In our research we measure the linear correlation between the intensity of respondents' social variables (gender, age, marital status, education level, the position in the organizational hierarchy), as variable factors and value judgments, as a floating effect. Thus, we build correlation coefficients entering the following notation for the variable factor x:

Sex: male x_1 , female x_2

Age: 30 years x_1 , 30 - 44 years x_2 , between 45 - 60 years x_3 , x_4 over 60 years

Education: elementary x_1 , x_2 environments, beyond x_3

Hierarchy: top managers x_1 , x_2 middle managers, managers of basic x_3 , x_4 performers.

Similarly, we introduce the following notation for the variable y result (value judgments about the dimensions of organizational culture, types of managerial behaviour, effective leader profile, types of Excellence leader):

Total agreement y_1

Partial agreement y_2

Indecision y_3

Partial disagree y_4

Total disagree y_5

or

agreement y_1

indecision y_2

disagree y_3

Conclusions

The models described in this paper is the set of indicators is based on an econometric variety of descriptive and factor analysis, structural and managerial behaviour in comparative economic organizations in Romania. Among them were:

- to characterize the dimensions of organizational culture at all levels of aggregation: the big companies, counties, regions, macro, national economy;
- characterization of managerial behaviour in all types of business organizations by field of activity according to CAEN code, by type of ownership of capital, depending on their size as number of employees;
- description of character and behavioural profile of the effective manager;
- characterization of the leader of excellence;
- according to various categories of respondents (by sex, age, education, hierarchy) on the various elements listed above characterization etc.

These econometric models, with minimal possibilities for the interpretation of measured results are used in the study phase of the pilot - the example of Suceava county, to develop national analysis by established analytical team in Bucharest, Craiova, Oradea, Suceava, Targu Mures, Galati, Resita, Braşov most competent scholars with interests in management, sociology and organizational psychology, computer science, econometrics.

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Annex 1

Elements of synthetic indicators of change,
based on scores from 1 (strongly disagree) to 5 (strongly agree)

Item	Score x_i	Respondents f_i	$x_i f_i$	$x_i - \bar{x}$	$(x_i - \bar{x})^2$	$(x_i - \bar{x})^2 f_i$
51	4,045	222	897,95	0,318	0,101124	22,4495
53	3,725	222	826,95	-0,02	0,004	0,0888
64	3,412	222	757,46	-0,315	0,0992	22,0224
Total	\bar{x} 3,727	*	$\sum x_i f_i$ 2482,36	*	$\sum (x - \bar{x})^2$ 0,200724	$\sum (x_i - \bar{x})^2 f_i$ 44,5607

$$\sigma^2 = \frac{\sum (x_i - \bar{x})^2}{n} = \frac{0,200724}{3} = 0,0669; \sigma = \sqrt{\frac{\sum (x_i - \bar{x})^2 f_i}{\sum f_i}} = \sqrt{\frac{44,5607}{666}} = 0,258$$

$$v = \frac{\sigma}{\bar{x}} \cdot 100 = \frac{0,258}{3,727} \cdot 100 = 6,9\%$$

Item	Score x_i	Respondents f_i	$x_i f_i$	$x_i - \bar{x}$	$(x_i - \bar{x})^2$	$(x_i - \bar{x})^2 f_i$
51	4,450	222	987,90	0,267	0,071289	15,8262
53	4,315	222	957,93	0,132	0,002299	0,5106
64	3,784	222	840,05	-0,399	0,159201	35,3426
Total	\bar{X} 4,183	*	$\sum x_i f_i$ 2785,88	*	$\sum (x - \bar{x})^2$ 0,232789	$\sum (x_i - \bar{x})^2 f_i$ 51,6794

$$\sigma^2 = \frac{\sum (x_i - \bar{x})^2}{n} = \frac{0,232789}{3} = 0,0776; \sigma = \sqrt{\frac{\sum (x_i - \bar{x})^2 f_i}{\sum f_i}} = \sqrt{\frac{51,6794}{666}} = 0,279$$

$$v = \frac{\sigma}{\bar{x}} \cdot 100 = \frac{0,279}{4,183} \cdot 100 = 6,67\%$$

Content questions to characterize the behaviour of managers in different situations

				Opinion score \bar{x}
Q51	If a state of tension or conflict, managers	Pa	work for reconciliation through dialogue with those involved	4,045
		Pd	should work for reconciliation through dialogue	4,450

				Opinion score \bar{x}
Q53	To impose their views in solving work tasks, employees	Pa	by managers are encouraged to respect the opinions of others	3,725
		Pd	should be encouraged by managers to respect the opinions of others	4,315

				Opinion score \bar{x}
Q64	Compared mistakes during their work, managers	Pa	are sympathetic (tolerant)	3,412
		Pd	Should be sympathetic (tolerant)	3,784

THE EVALUATION OF EDUCATIONAL SERVICES QUALITY BY THE STUDENTS OF THE FACULTY OF ECONOMICAL SCIENCES „DIMITRIE CANTEMIR” CLUJ-NAPOCA

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Abstract: The evaluation of the educational services quality by the students represents an important element of the internal quality monitoring process for the identification of the necessary actions required in the continuous improvement of the offered educational quality, and on the other hand it represents an indicator of the university interest of having access at the student's point of view. Starting from the student needs, together with the staff involved in the evaluation and quality assurance committee of the Faculty of Economic Sciences Cluj-Napoca, “Dimitrie Cantemir” Christian University Bucharest, we elaborated a questionnaire for the evaluation of the educational services quality by the students, concerning: teaching-learning activities, available admission information, tutorial system, class schedule, material base, laboratory, course and seminar rooms equipments, administrative services, student organizations, counselling services offered by the faculty. The conclusions of the study were discussed with the faculty's management, decisions being made to take actions in order to increase the student satisfaction level.

By developing and implementing their own strategy to quality policies and procedures, the higher education institution is explicitly committed to develop a quality culture in all its activities.

Keywords – quality, university management, educational services, higher education, the quality circle.

JEL Codes – I23, M10, M31.

The questionnaires were individually applied, between May and June, to the students following the bachelor's degree programs of the faculty, regardless of the education form or the specialization, the results being as follows:

32 questionnaires were applied through personal interview, all of them being validated as they were fully completed;

40 questionnaires were distributed among the students, only 27 of them being processed in the end (because only these many were brought completed to the faculty's Evaluation and Quality Assurance Committee).

The results of the study are given below.

At the first question, related to the importance of the Romanian higher education, in their professional preparation, the respondents appreciated:

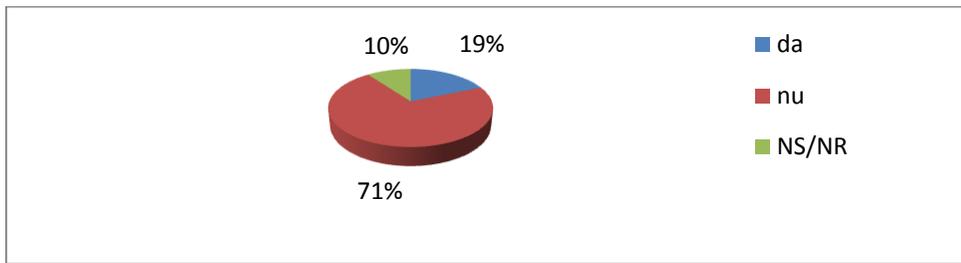


Fig. no.1. The answers to the question related to the importance of the higher education in Romania. Realised by the author

The ones who chose the first answer version (“yes”), cumulate approximately 19% of the respondents. We could say that they have confidence in the bigger chances of integration on the labour market after obtaining a higher education diploma. We assume that these students consider that the higher education offer has been very well adapted to the needs imposed by a changing society.

The majority of the questioned students (approximately 71%) consider that the higher education has not managed that well to adapt to the changes in the Romanian society, maybe from the same reasons why they consider that the society is heading towards a wrong direction. The expectations, the needs of these students, in their opinion, are not fully satisfied by the higher education offer. In this respect higher education institutions can be recommended a more extensive analyze of the Romanian society.

The students that preferred the third choice (DK/DA) add up about 10% in the total answers. Like a short motivation to these answers, we could think about the fact that these students, are either not informed about the evolution of the higher education in Romania or maybe they don’t believe that the risk of not finding a job after the graduation of these studies is too big.

The question “*You have chosen to become a student of the Faculty of Economical Sciences, Cluj-Napoca, “Dimitrie Cantemir” Christian University, Bucharest. What were the main reasons of your choice?*” is trying to identify what were and what still are the main information source for the future students, related to the faculty they will apply to, the answers highlighting the following:

Approximately 15% of the respondents chose this faculty because they considered it a faculty with a high level of education. Through quality we understand quality of offered conditions and services.

12% of the ones questioned answered that they made this choice because of the level of the tuition fee. We can say that they consider the tuition practiced by the faculty acceptable in comparison with their income.

The third answer choice (“I preferred to be a student in the city where my parents live,”) had a 5% of the total answers. It is possible that these students are still living with their parents or they wish to stay close to their families.

A good marketer appreciates that the advertise coming from the satisfied clients is the most inexpensive and in the same time the most efficient way of promoting the products and services offered by a company. It is also said that 20 satisfied clients can bring another 100 to the organization. These theories are also available for our study, which is proved through the very high percentage (60%) of those who chose this faculty at the advice and insinences of other people (these people being considered those clients satisfied by the quality of the education in the faculty).

The “DK /DA” was the choice of 2% of the students. We could say that this students got into registered into this faculty without putting into the balance what is important for their career,

without allow time for thinking about this decision or simply refusing to give a concrete answer to this question.

The following question offers information about the student satisfaction, the respondents having to appreciate the next aspects:

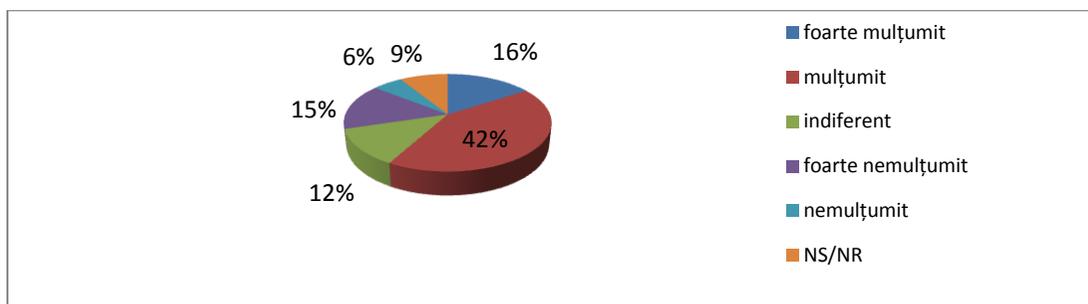


Fig.nr.2 The answer to the question related to the student satisfaction

Realised by the author

According to the chosen criteria, about 16% of the students declared that they are very satisfied with the conditions and services offered by the faculty. This could be a gratifying percent for the faculty's administration, but it cannot be considered big enough or satisfactory enough.

Approximately 42% of the students declared that they are satisfied with the conditions and services offered by the faculty, while 12% are not concerned about them.

From the ones questioned, 15% declared themselves dissatisfied and 6% very dissatisfied with the conditions and services offered by the faculty. Therefore a 9% of the students are left, who do not consider themselves able to evaluate some of the criteria regarding the activity that takes place in the faculty and the conditions it offers or they just refuse to give an answer.

Regarding the question related to the services offered by the Centre for Information, Counselling and Career guidance for students out of the total questioned students, approximately 5% answered that they are very satisfied with the services offered by the CICOC Centre, and about 19% said they are "satisfied" with it. The percentages for the other answers present themselves as follows: 41%"indifferent", 35%"DK/DA". The CICOC Centre is a service made available for the students to guide them in their career or to help them make a decision about their future career. The 41%, respectively 35%, mentioned above could raise question marks regarding the notoriety of this centre among the students. One recommendation that we can do from this point of view to the faculty management is to concentrate on promoting the centre and thus try to attract more students into the information and career orientation centre.

The usefulness of the studied subjects in relation to the specialization's (study program) requirements.

The percentages of the answers given to this criterion are the following: 22 % „very satisfied”, 44% „satisfied”, 13% „indifferent”, 19% „dissatisfied”, 2% „very dissatisfied”.

The study programs are formulated in detail, according to the results expected by learning and are matched with an academic qualification. Therefore, subjects to be studied separately for each specialization must be carefully selected to meet program objectives and targets.

The percentages are quite satisfactory, which means that the curriculum is well thought out, in accordance with the requirements of the specialization.

However, there is a fairly large percentage of students who were not satisfied. Talking with some of them I found that their complaints are related to the fact that they consider some material unsuitable for their specialization or expect a greater depth of material (in terms of practical application of the theory studied).

Complementarities and relations between classes

Flow rates are needed so that information obtained by studying a subject to be related to the information material studied further on, to create a "homogeneous" field where all the parts fill each other.

A very high percentage was obtained to the "satisfied" option, approximately 36%, but nevertheless an almost equal percentage (about 32%) was obtained for "dissatisfied." All of this could be related to the above criterion, namely „usefulness of subjects studied in relation to the requirements of specialization”

The other answer versions cumulated approximate percentages of: 12% "very satisfied"; 7% "indifferent"; 13% "very dissatisfied”.

Teacher-student communication

After the responses given to this statement we are very pleased because about 71% of students surveyed were "very satisfied" or "satisfied" with how their communication with teachers is carried out.

A percentage of about 12% of students say "indifferent" ,10% are "dissatisfied" and 7% "very dissatisfied."

The quality of the faculty website:

A percentage of about 10% of surveyed students are "very satisfied" with the quality of the faculty website, and about 42% are "satisfied."

These percentages are considered positive, but, nevertheless, a percentage of 31% of students are "very dissatisfied" and 10% are "dissatisfied" with the quality of the site. We believe that we should improve the website of the faculty since lately young future students prefer searching the internet for the desired information on the faculties which they want to follow.

The quality of information provided by faculty staff (decisions, regulations, etc..)

The satisfied and very satisfied students, in relation to the quality of information provided by the faculty staff cumulated a rate of approximately 36% (5% "very satisfied" 31% "satisfied") of all responses. This can be considered a positive response.

But however, the real situation is the fact that, about 47% of respondents are dissatisfied or very dissatisfied with the quality of the received information.

Given that the percentage of dissatisfied students is higher than of the satisfied ones, we propose changing the way the students are being informed (from the summary information on the bulletin board to the detailed information available on the site, etc.).

We also obtained a rate of about 15% of students who said they were "indifferent" probably because, probably, for their part, student life at a university is about going to classes or not, passing the exams and all these, without considering other activities taking place within the faculty where they study.

About 2% of the students chose the answer "DK/DA"

Sense of community (student teachers)

We've all been told Lenin's famous words: "Learn-learn-learn!!!" But life in a university requires more than simply learning activity. It requires the formation of links, student growth and development within an academic community, a sense of community.

However, unfortunately, after analyzing the results we observed that not much sense of community is reflected among students. According to the answers , we have 7% "very satisfied" ,22% "satisfied" ,15% "indifferent" ,35% "very dissatisfied", 2% "dissatisfied" 19% "DK / DA".

We consider however, the percentages of the variants "regardless" and "DK / DA" rather sad than unsatisfactory. Efforts to create a "community" should not be made only by teachers but also by students. I believe now that Lenin wanted to say, "Learn- theory-learn to communicate -learn to behave!!!"

At the question "In general, in relation to the activity and the conditions offered by the Faculty of Economic Sciences in Cluj-Napoca" I am:" the questioned students answered: 13% "very satisfied"; 63% "satisfied"; 19% "unsatisfied"; 5% "very unsatisfied".

The results of this question show the fact that more than half of the questioned students declared themselves satisfied with the activity and the conditions in the faculty. If we consider the stipulations of the ARACIS methodology for external quality evaluation, which considers that if the minimum level of students that appreciate positively the learning/development environment offered by a higher education institution and their own learning path is 50%, then we can say that the faculty is in a good position from this point of view. However we cannot ignore the percentage of around 25% of students who are unsatisfied in relation to the activity and the conditions offered. This raises the problem of identifying the needs of the students and finding the methods for satisfying them as efficiently as possible.

CONCLUSIONS:

The students who filled in the questionnaire, according to the factual data, are mostly people over 30 years old, from urban areas, therefore we can consider that their answers are based on a life experience and an already established personality with a well-defined character.

We must take into account the fact that more than half of the respondents are from Cluj-Napoca, city considered one of the "big university centres" in Romania. This is because the lifestyle and the way of thinking in such a city cannot compare to the lifestyle in a smaller town and much less to the way of thinking and living in the rural area.

Also the type of education, year of study and specialization must be taken into account as policy makers in providing answers. The year of study is important in several ways, among which we mention the fact that, for example, the students in the second year are halfway through the study period. Therefore they do not know the content of all the subjects they are going to study, they are undecided (and, on one hand it is normal to be this way) on the career to follow, they are not decided on the job they wish to fill after graduation, etc. Specializations are a decision maker because they focus on labour market areas.

Speaking of employment, as part of the society we live in, in the present conditions of financial crisis it is not considered particularly "thriving". That is why I believe that some students gave negative answers to certain questions, such as forecasting a future for the changing Romanian society. However, leaving aside their social condition (not related to the activity in the faculty), I consider that the interviewed students appreciated positively the quality of the educational services offered by our faculty. The negative percentages obtained with certain evaluation criteria, can be fixed with little effort from all parties involved. For example, a closer communication between academics (teachers, tutors or faculty management) and students, *as many students as possible*, may reduce complaints about the quality and the quantity of the information offered by the teachers to the students, it could increase the sense of community, it could change the opinion of certain students on the complementarities and relations between classes as well as on the usefulness of the studied classes etc. It is understood that in order to remedy all these, a high level of student's participation in class is a must.

However the main problem is not the teacher-student communication, but the lack of effective participation of students in organized activities within the faculty. We consider inappropriate for such a large percentage of students not to be able to have an opinion, be it critical or appreciative, regarding the activity of student associations. Also there is too much indifference regarding the services available for students within the COCOC centre which was especially designed / created for students.

As a final conclusion, we wish to point out however that there is a disregard to the conditions and services that are available for students. I believe that as long as there were complaints against

them, suggestions could be made to the faculty's management and the spaces concerning these suggestions wouldn't have been left blank.

Higher education is a service offered to the society, with a great impact on the personal development of individuals, because it gives them " a chance for greater autonomy, a greater social mobility, professional and international mobility, higher incomes and an increased personal empowerment" (1) It is also, why we strongly affirm that the Romanian higher education has contributed and should contribute in the future in the formation of the nation, the development of Romanian society's intellectual capital, the training of elites from different activity fields and the consecration of the most important Romanian values.

In the last decade, the Romanian universities have gone through an extensive transformation process, which is not over yet. Changes imposed by the Bologna Process, the transition towards the knowledge economy, multiculturalism, information society, the pressure of more and more people to access higher education, face universities with new requirements.(2) At the same time, within the European and global academic space new universities are developing - such as the virtual or transnational ones - which compete with the traditional ones, competition that does not identify itself with anything that existed in the academic area ten years ago. The effects of this competition are felt in our academic area, causing profound changes in the specific rules and procedures of higher education, in the specific values of one or another of the Romanian universities, in the behaviour of the two categories of "actors" involved in the act of education : teachers and students. By developing and implementing their own strategy in the quality policies and procedures, the higher education institution explicitly commits for the development of a quality culture in all its activities.

Personally, I consider that the main objectives of the higher education institutions must address quality and at least in terms of relationship with the students these objectives should be:

- student involvement in extra-activities (debates on college activities and processes) in order to improve them;
- creating analysis and synthesis skills, communication and interpretation of certain situations, events, actual actions and activities;
- developing creativity in an ameliorative thinking system, to find solutions.

Given the conducted survey and its results we propose for the future activities of the Faculty of Economic Sciences, Cluj-Napoca, a discussion forum about the quality of teaching and learning within the faculty, organized under the title **Quality Circle**.

The circle of quality should be an activity based on a free agreement between students from all majors and years of study and at the dean's initiative. Meetings will be held once a month and, in general, will be attended by heads of year and other representatives.

The purpose of debates is to understand the concept of quality, not on a general level, but a concrete and practical level of the activities and processes that are actually occurring and to interpret the current situation, not from the perspective of finding guilty ones but solutions to improve. For example, if a student has passed an exam but does not have the mark written in the student book, we must not identify the responsible person for this situation (teacher, secretary, etc..), But solutions must be found to establish rules concerning the registration of marks (one teacher writes marks in the booklet - the teacher or assistant).

At the end of the academic year, the activity of the Quality Circle can be monitored, identifying the main conclusions and improvement proposals for certain activities. For example, in virtue of the conclusions drawn at the end of an academic year proposals can be submitted, that include solutions to problems identified on the way: changing the site, improving communication, etc.

The success of the activities carried out under the Quality Circle stands in the satisfaction of seeing the students participating in an organized way to improve faculty processes. Thus, the faculty's management knows better what the perception on various activities is, among students

and can apply procedures to improve on some activity components: schedules, teaching, seminars, students practice, the preparation of essays, evaluation etc. In the context of student-centred education, a requirement is that students are explained the working methods so that they understand the regulations and criteria for the requirement, without excluding the possibility of improving them. Future plans relate mainly to the effectiveness of professional practice and improve the practice period, both in duration and in the actual performance. It refers to defining new forms of partnerships or agreements with institutions that can accommodate the practice.

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SOCIAL PERCEPTION OF THE EDUCATION SYSTEM REFORM. SURVEY CONDUCTED IN UPPER HIGH SCHOOLS OF BIHOR COUNTY

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1. Introduction

Between the elements which mark the global processes, we can include educational issues, the management of processes in pre-university education. Therefore, the synthetic approach to educational problems in Romania, studied in terms of the processes and the phenomena of social development, but also due to the need for submitting the pre-university Romanian educational process to the European Union requirements, appears to be current and important. This analysis focuses on the decentralization of education. This theme is a true significant of the stage and of the the changing potential of the management practice in the public area. Its actuality is also hard to contest under the conditions in which changes in this area have been slow compared to those of the other countries that joined the European Union (Hungary, Czech Republic, Poland), contradictory and inconsistent (Herczynski and Levitas, 2001: 1-2). The legislative changes, training facilities, as well as the constant institutional reorganization of pre-university education show the presence of an active interest in this matter. However, the real reform of university education still requires essential improvements. This study analyzes the social perception of performers in pre-university system, establishes positive and negative aspects of the reform in pre-university education, all from the perspective of teachers. The research was conducted between March 1st, 2011 and April 1st, 2011. During this time the questionnaire was applied and the data interpreted. The data obtained from the questionnaire interpretation were introduced into the SPSS program. For the analysis and interpretation of data we used SPSS 15.0. under Windows license. My investigation efforts were directed towards the impact of decentralization on the performers in pre-university education system and on their perception. The main purpose of the experimental study was to determine the essential perceptions of the performers involved in the decentralization process. Two general hypotheses were formulated: it is presumed that there is a negative perception concerning the reform in pre-university education, and it is also presumed that the reform in pre-university education does not coincide with a quality education, hypotheses confirmed at the end of the research.

2. Literature review

After Romania joined the EU in 2007, the reforming and adapting of education was more dynamic and priority focused from the perspective and requirements of the European Union structures. Moreover, in the official documents of the Ministry of Education and Research there is often a formula concerning the achievement of compatibility between Romanian education and EU rules, this being a defining part of the education reform policy in our country. An enumeration of external performers that contribute decisively to the deterioration of educational problems reveals the following list (Colceac, 2010: 1):

- The politicization of education that, notwithstanding the degree of professionalism of the administrative staff, raise to the level of system management people without skills necessary to ensure quality education. This external education and its flawed structuring is the factor with the highest weight in destroying the education system;
- Removal of teachers from the system without considering their professional quality and the evaluation of their work and results. The elimination based on being a holder or not, is contrary to the most elementary rules of increasing the quality in education;

- Demotivation of wages in education made by some politicians who show their inability to manage a nation. This demotivation obviously contributes to a great number of valuable people leaving the system, deciding on changing their profession.

The three causes external to the system shield the internal issues of education, which are the following: a curriculum based on speculation, not on practical application of information, an outdated assessment system, which makes only quantitative estimates, without taking into consideration the quality of education; a centralization made by a ministry staff largely composed of political appointees who do not have the necessary competence for the proper functioning of the system; a lack of autonomy of schools, who can not adapt to the crises conditions, a teaching staff with little training and the young ones with a poor professional training, a salary system that eliminated the performance and quality in education in the grid of wage growth, the lack of specialists in education in schools and complete lack of compensatory education programs that lead to solving school matters, except for programs provided by some NGOs; the lack of a labor market oriented education, community development without personal development and further use of a mass education without immediate practical application, a poor working relationship between parents and school because being a teacher is not considered a liberal profession and therefore it does not respond to market needs, but to political order. To these external or internal causes we can add the fact that the collective **terms** of employment at national level lead to the trade unions being unable to exercise pressure upon the government.

4. Results of the research:

In the methodological approach to see whether the assumptions made in the study are accurate, we have appealed to a quantitative type analysis. This data analysis will reveal the overall results provided by participants in this study, allowing the observance of the results trend and of those who were the subjects of this study. Based on statistical analysis and interpretation of sociological type we will define the results obtained from a spelling of methods that lead to the verification of the study hypothesis. Also in this approach we will make a series of charts to highlight the study assumptions.

Hypothesis no. 1

For Case 1: "It is assumed that there is a negative perception concerning the reform of pre-university education"; we used a qualitative analysis to determine the truthfulness of the hypothesis

	Frequency	Procent	Procent valid	Procent cumulat
Valid not coincide	14	17,5	17,5	17,5
to a lesser extent	31	38,8	38,8	56,3
to some extent	25	31,3	31,3	87,5
fully coincide	10	12,5	12,5	100,0
Total	80	100,0	100,0	

Table. 1. Frequency table for item no. 2 "To what extent do your aspirations coincide with the current changes"

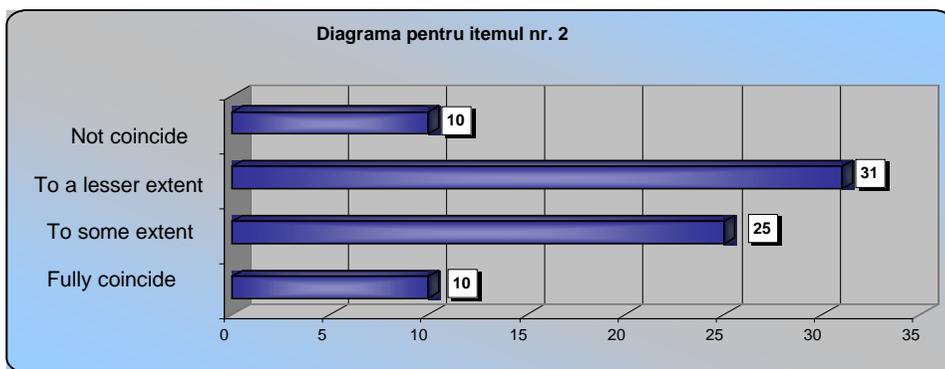


Fig. no. 1 Diagram for item no. 2

The presence of this frequency table and the chart of the studied item indicate a range of issues. Participants in the study say at a rate of 38.8% that the current changes do not coincide with their aspirations and a percentage of 17.5% believe that these measures do not coincide at all with their aspirations. Negative perception expressed by the ratio of scores is also visible in Fig. 1. This fact comes from the distrust of the study participants in the new educational reform and a reluctance to what this reform will bring. Also to confirm the first assumption we used the analysis of item no. 4 which says: "Specify the main weaknesses of the reform."

	Frequency	Percentage	Valid percentage	Cumulative percentage
Valid encouraging corruption	26	32,5	32,5	32,5
favoritisme	23	28,8	28,8	61,3
involving people from outside the system	18	22,5	22,5	83,8
financial constraints	13	16,3	16,3	100,0
Total	80	100,0	100,0	

Table. 2 frequency table for item no. 2

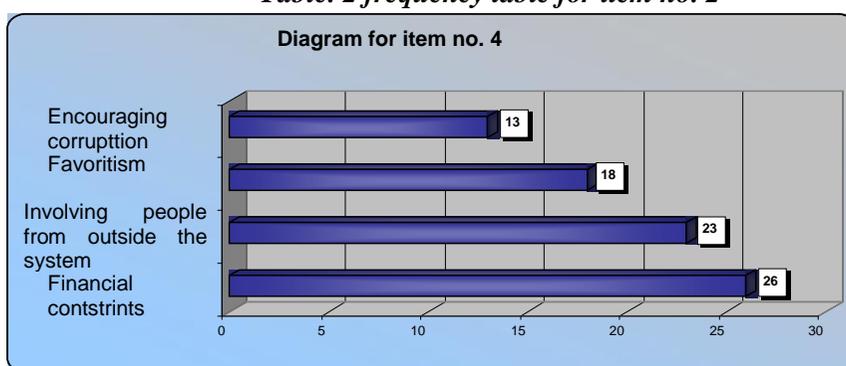


Fig. no. 2 Diagram for item no. 4

The analysis of the frequency table and figure no. 4 shows the great negativism related to the reform perception. According to the study participants encouraging corruption is the first major element, followed by favoritism, the involvement of outsiders and also by financial constraints.

Regarding the two items we can say that the first case examined was confirmed and that there is a negative perception towards pre-university education reform.

Hypothesis no. 2

For Case no. 2 "It is assumed that the reform of pre-university education does not emphasize the aspects of a quality education " we used a qualitative analysis to better observe the answers of the participants in the study.

For confirmation of the two hypotheses we analyzed items 7c, 7e and 7f. 7c "Continuous Improvement of Education Officials'

	Frequency	Percentage	Valid Percentage	Cumulative percentage
Valid largely	11	13,8	13,8	13,8
quite a lot	12	15,0	15,0	28,8
moderate	29	36,3	36,3	65,0
insignificantly	22	27,5	27,5	92,5
none	6	7,5	7,5	100,0
Total	80	100,0	100,0	

Table. 3 frequency table for item no. 7c.

7e. "The growth of transparency of organizing the competition for employment and promotion in pre-university education."

	Frequency	Percentage	Valid percentage	Cumulative percentage
Valid largely	4	5,0	5,0	5,0
quite a lot	22	27,5	27,5	32,5
insignificantly	44	55,0	55,0	87,5
none	10	12,5	12,5	100,0
Total	80	100,0	100,0	

Table. 3 frequency table for item no. 7e.

7f. "Development and capitalization of teachers' potential"

	Frequency	Percentage	Valid percentage	Cumulative percentage
Valid largely	2	2,5	2,5	2,5
quite a lot	42	52,5	52,5	55,0
moderate	27	33,8	33,8	88,8
insignificantly	9	11,3	11,3	100,0
Total	80	100,0	100,0	

Table. 3. Frequency table for item no. 7f.

The three frequency tables illustrate how education reform issues are viewed.

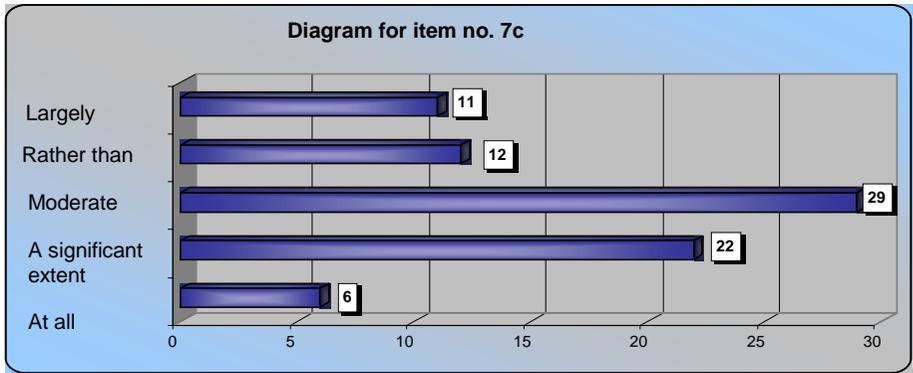


Fig. no. 3. Diagram for item no. 7c.

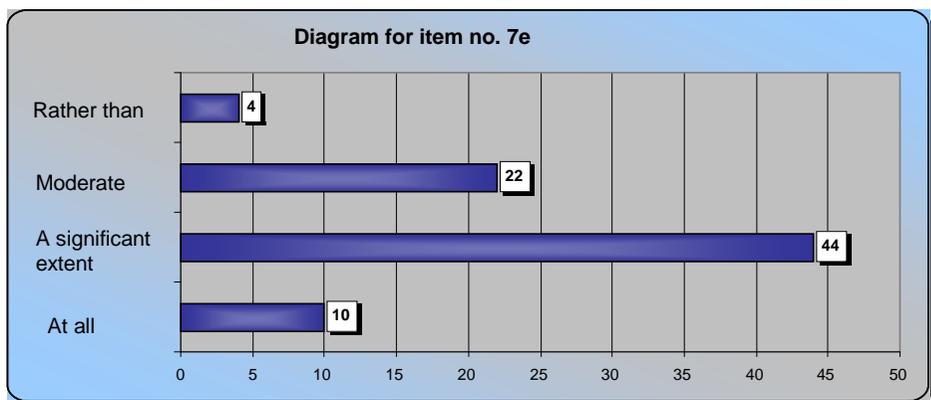


Fig. no. 4. Diagram for item no. 7e.

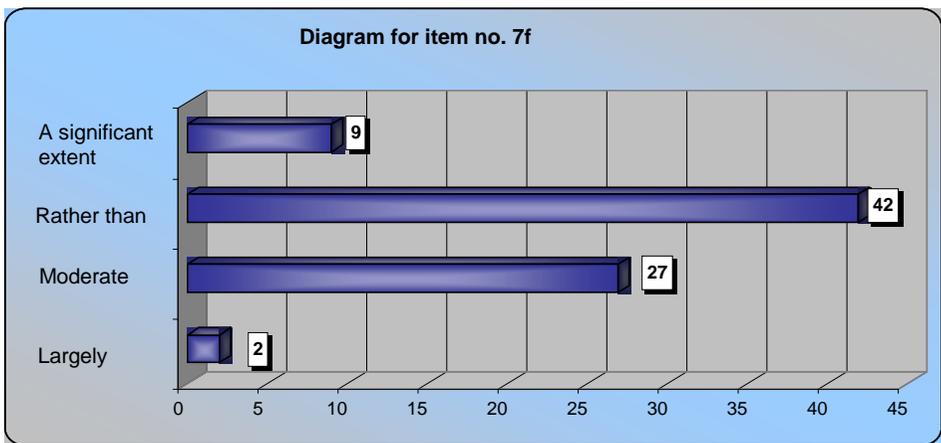


Fig. no. 5. Diagram for item no. 7f.

According to the study participants, the new educational reform does not highlight the aspects of training and preparing teachers for quality education. This chart is given in Fig. 3 which targets the improvement of staff training in schools. Score 29 for moderate and 22 to a minor extent comes and confirms that fact. For item 7e, which targets the increase of transparency in organizing the competition for employment and job promotion in pre-university education, its

results, ie a score of 44 for minor extent is eloquent for this phenomenon. Lack of transparency leads to suspicion regarding this phenomenon. For item 7f, concerning staff development and capitalization of education staff potential, the results are eloquent for „moderate“, the score being 27. After analyzing the three items listed above we can say that hypothesis no. 2 was confirmed after a quantitative analysis of the data obtained.

5. Conclusions

In this study we have highlighted aspects of the study participants' perceptions on the Romanian education reform. For the first hypothesis which assumes that there is a negative perception concerning the reform of pre-university education, the qualitative analysis of the items studied allowed the confirmation of this hypothesis. The changes in present measures do not coincide with the aspirations of the study participants and there are also highlighted the weaknesses of the reform such as: encouraging corruption, favoritism and involvement of others outside the system. The qualitative analysis allowed confirmation of the first working hypothesis. For the second hypothesis, which presumed that the reform in university education does not emphasize the aspects of a quality education, we used the analysis of three items: 7c, improving continue training of staff in education, 7e, increase of transparency in organizing the competition for employment and promotion positions in pre-university education and 7f, development and capitalization of teachers' potential. The quantitative analysis of items led to the identification of issues that the participants in the study have revealed. Thus, an insufficient training of staff in education, a lack of transparency in the contests for seats in pre-employment and a weak capitalization of the educational potential of teachers prevent this system from having quality in education. The qualitative analysis allowed the confirmation of the second hypothesis of the study.

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PhD STUDENT LECTURER :
SABAU REMUS MIRCEA

Thesis title is :, THE INCREASING OF HIGH SCHOOL TIPE EDUCATIONAL ORGANIZATIONS PERFORMANCE, FROM ROMANIA BY IMPROVING THEIR MANAGEMENT “

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GENERAL CONSIDERATIONS REGARDING THE EVALUATION OF PERFORMANCES OF EMPLOYEES IN A SME

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The evaluation of performances, in a broader meaning, is deemed an action or a certain type of cognitive activity whereby an evaluator assesses or estimates the performance of a person in relation to the performance standards settled, as well as his/her mental representation, with his/her own system of values or his/her own conception regarding the performance obtained.

The performance evaluation systems are an intrinsic and utterly important part of the management of human resources system, because the evaluation, when it is not done as a mechanical activity, turns out to have a significant influence on the economic/social activity and on the organisational climate within an organization, with direct repercussions on the efficiency increase in general and the productivity in particular.

Key words: performance evaluation, appreciation, performance management

The evaluation system of the employees has the main objective of improving communication between the employees and the organization management and that of providing a working climate as favourable as possible to carry out the activity. At the same time, depending on the results of employees' appreciation, the organization management can adopt a series of measures regarding:

- The establishment of some forms of improving the professional training for certain employees;
- The adopting of a new solution regarding the level and waging modality of some employees;
- The promotion of some employees etc.

Still, at the same time, each employee is interested in getting an appreciation as objective as possible of its activity and potential because this way, he/she can know better the development opportunities existing at the level of the organization, the requirements and means of improving their professional training, the perspective for the development of their career within the organization and the possibilities of multiplying awards.

The systems for the assessment/evaluation of the employees must be adapted to the specificity of the activity carried out by each employee, to this end it is necessary to carry out:

- An assessment/evaluation of the employee in relation to the requirements and the particularities of the job (or the position) he/she is occupying;
- A differentiated assessment/evaluation, in step with the responsibilities attributed to each job.

The competition context and the desire of the organizations to develop require a permanent preoccupation to increase performance. This explains why the theoretical concepts regarding the performance, become more and more numerous.

For a better understanding, we underline the contents of some of these concepts:

- The professional performance represents the level of accomplishments of an employee by the reference to the performance standards.
- The social performance refers to the impact of the managerial activity on the employees, being defined by the intensity with which and individual contributes to the development of the organization, by the reference to the objectives and standards established.

- The performance management can be defined as a strategic and integrated approach of ensuring the long-term success in the organizations activity, by improving the performance of people working in them and by the development of the teams' abilities and the individual participants.

The performance management consists in a systematic approach of the human resources management, in general and the performance evaluation in particular, using the objectives, performances, assessments and feedback as means of motivating the employees so that they can understand and use to the maximum their creative potential.

- The evaluation of the performances is the basic activity of the human resources management, carried out in order to determine the degree in which the employees in an organization accomplish their tasks and responsibilities effectively.

The performance evaluation process is defined as an ensemble of standardised procedures aiming at obtaining information, in a system of managerial hierarchy, regarding the professional behaviour of the organization staff. Two aspects are emphasized from the definition presented:

- The evaluation procedures used by the organization correspond to the vision of the unit regarding the way in which they organise their activities and orient their staff;
- The procedures are standardised, avoiding as much as possible the negative effects caused by the evaluators. The standardisation can be provided by the evaluators' training, the use of written documents or audiovisual means and the control of procedures by a specialised compartment;
- The system of obtaining information and carrying out the performance evaluation is in tight agreement with the managerial hierarchy.

The success of the evaluation process is conditioned by the quality of the criteria used. They must meet the following conditions:

- They should be formulated in a simple, clear and concise way, they should not comprise generalities and they should be understood both by the evaluators and the people evaluated;
- Their number must be limited, because the use of too many criteria might lead to the levelling of the results, their relevance being diminished;
- They should be quantifiable, so that they should diminish the challenging of the results;
- They should be applied to all the subjects who carry out their activity in comparable conditions.

The managerial theory and practice in the field of human resources certify the fact that there is no ideal procedure for the evaluation of the performances, the methods and techniques used being the expression of an action from certain factors influencing the system for the performance evaluation. From these factors, we note:

- The history and culture of the organization – the evaluation of human resources performances depends on the history of the organization and its system of values (organisational culture);
- The size of the organization and its line of business – the great organizations in the sectors with a strong competition were the first to develop formal evaluation systems, determining the employees to understand the role of performance;
- The strategic orientations – determine the choice of those performance criteria, which are in compliance with the organisational mission, objective and strategies;
- The practices used in the employment, payment and promotion of the staff – the waging system represents one of the most important factors in choosing the procedures for the evaluation of the performances, because, if the salaries level is caused by other factors but the performance, then the evaluation loses its purpose, becoming a formal activity. Moreover, in an organization in which promotion is done intuitively, there will always be a tendency not to use the evaluation of performances as an operational variable in the management of human resources;

- Working environment has direct repercussions on the professional performances by: the failure to accomplish the tasks, absences and delays, a high rate of human resources fluctuation.

The manager of a small business really needs a system for the evaluation of the employee that allows him/her to answer the question: "How well do my people manage?" In such a system, the performances and progress of each employee can be evaluated, and the results above average can be rewarded. If no system of management by objectives is used, criteria such as the following can be used: a) the workload and work quality; b) the cooperation spirit; c) the initiative; d) the confidence; e) the training; f) the teamwork skills. A simple scale can be created (qualitative) that can influence the waging of that person. Going further, only such criteria can allow the manager to define realist objective and the degree of accomplishing them.

The managerial research and practice in the field prove that small organizations generally prefer an informal system for the evaluation of performances, functioning at the same time, pretty well correlated with this one. The advantage of an informal system of performances evaluation consists in the fact they require less time of design and administration, compared to a formal evaluation system.

Hornsby and Kuratko considered that the evaluation of the performance varies in step with the size of the company and the industrial sector. They identified narrative descriptions (essays) of the employees' performance, the evaluation of their capacity of accomplishing the objectives, the use of some value scales as methods of evaluation that increased in importance alongside the company size. In contrast, MacMahon and Murphy have brought arguments according to which the entrepreneurs don't usually have, the necessary training in order to make concrete evaluations of the performances and they might perceive the formal systems for the evaluation of performances as a waste of time. In very small companies, the evaluation of the performance is informal and continuous because the entrepreneurs-managers control directly all the activities. As the control space increases, the evaluations are expected to be more formal and to take place at bigger time spans.

The entrepreneurs-managers find it difficult to provide confidence to employees and they are reluctant in delegating tasks.

Kotey and Slade asserted that the evaluation of the workers' performances by the middle level managers extended alongside the company size. As the company size increased, one could note the use of more evaluation methods at the managerial level than the operational level. At the same time, the survey shows that most of the companies have evaluated the performance of their employees, mostly in small and medium enterprises (82.4%, 80% respectively). At the micro-enterprises, the tight connection of the entrepreneur with the employees allowed them to notice and correct the errors almost immediately. The evaluation scales were the most used methods at the operative level, and some employers compared the performances between the employees. As the number of employees increased, the evaluation of their performances was gradually trusted to the managers to whom they were subordinated (47.4% in the medium enterprises compared to 19.5% in the micro-enterprises).

The use of the evaluations carried out by peers and of self-evaluations was extended alongside the size of the company. Nevertheless, at the operational level, the use of other methods of evaluation has seldom changed as the size of the company grew.

Conclusions

At present, more and more small and medium face the need to increase the productivity of work and for that, they have limited possibilities. One of the least exploited means of increasing work productivity is to improve the human performance or, maybe, better said, most companies try it but few of them succeed it.

The low opportunities for the limited formal promotion and instruction in the micro-enterprises, compared to the small and medium enterprises, can explain why the performance evaluation aims less at estimating the employees' training needs and the promotion possibilities. This suggests that the micro-enterprises cannot afford to bear the costs of a long-term training for employees with weak performances.

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DO WE REALLY HATE OUR JOBS? DETERMINANTS OF JOB SATISFACTION IN ROMANIA

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Job satisfaction is said to be an important factor of productivity at work along with having the proper training, interests and motivation. Frustrations at work may derive from different aspects of the job itself, the work environment as well as personal motivation for work and its results. Human resources management theories focus on job satisfaction and motivations as means for achieving the institution's objectives, and consequently see motivations and satisfaction at an individual level. Our paper investigated these issues at macro level, going beyond the individual variables of job satisfaction to the ones that explain the attitudes towards work at national level. This approach is derived from cultural theories analyzing attitudes towards work as a cultural value that varies across nations. In this manner we analyze data at national level, investigating the factors that influence work satisfaction and attitudes towards work of Romanians.

This paper aims at explaining the identified differences regarding the individual's attitude towards their professional life. Considering the fact that work occupies a lot of time in people's life and it is considered the second most important aspect of life after family, we questioned the aspects that explain the levels of job satisfaction both in the light of theoretical constructs and as results on the Romanian population. These indexes have a direct impact on the quality of life, reflect the level of development, as well as point to further social aspirations of individual actors. The current analysis reflects on different aspects of the appreciation of work and investigates variations of work satisfaction: Which is the value attributed to work? How important is work and how satisfied are individuals with their jobs? Which are the characteristics that determine variations of job satisfaction?

After a theoretical synthesis of different approaches of work related attitudes in the literature, the second section presents the data and the main research findings. For data analysis we used the data obtained in the European Values Survey 2008, research conducted by the Romanian group for the study of social values, supported by the Research Institute for Quality of Life. Other data used in this paper derived from a research program developed at University of Oradea – Social Sciences Faculty - HURO 0801/180 ENRI. The research section of this paper follows the theoretical questions: first we focus on the value attributed to work by Romanians and its contribution to self definition, then reflect on the significations of work, and finally explain the levels of work satisfaction. The main findings of our analysis suggest that even though work is seen as very important by Romanians, the main explanatory factor of job satisfaction at a general level is connected to economical status provided by a certain job. In the concluding section we stated several research directions that would provide better insight in this topic.

Keywords: appreciation of work, job satisfaction,

JEL codes: M12, O15, J89

Theoretical aspects

The analysis regarding work motivation and satisfaction derives from two general lines: the first one is in connection with work theories: work psychology and sociology, management, especially human resources management which deals with individuals and the effects of professional

activities of the individuals over the institutions in which they are performing their activities. The second dimension is in connection with the analysis of economical policies, different work indicators (incomes, work hours, professional training, satisfaction, commitment to the organization) being taken into consideration for measuring the well-being of the citizens and also for doing evaluations and comparisons between countries. We are going to present the general elements and results of the researches from both directions in order to point out their importance and interdependence. A general analysis of all attitude co-variables regarding the job has to contain both individual and organizational characteristics of the field of activity and also the ones from the macro-social level, like the political-economical environment; the effects of satisfaction/dissatisfaction towards the job can also be found in all of these three levels.

From the first approach category regarding work, it is important the classical distinction between the types of work motivations are based on intrinsic-extrinsic classification. The individual characteristics, like responsibility (the feeling that own work is important), autonomy, the possibility of usage and development of own abilities etc. belong to the first category, these being stable characteristics in time, from which the perceived professional life quality's appreciation derives. Extrinsic motivational factors contain all kinds of rewards and penalties: bonuses, promotion, criticism, wage diminishing (Armstrong: 2009). The types of motivations that act upon the individuals are important for the work satisfaction: a motivated person who gains the awaited work benefits (be it intrinsic or extrinsic) is satisfied by the undertaken professional activity. Motivation can be defined as "the sum of forces, internal and external energies which initialize and lead the behavior towards an objective, which once fulfilled determines the satisfaction of a need", in other words, work satisfaction is directly influenced by the satisfaction of motivational needs (Abrudan: 2009). Thus, the level of satisfaction can be influenced by opportunities, independence, relationship with co-workers, communication with the superiors, success obtained in the field of work etc. Money is the most direct and obvious type of motivation, not because of its intrinsic value, but for the things that can be achieved with it: social prestige and position, access to superior goods and resources. Contrary to a general and accepted perception by the common sense, the studies do not demonstrate a direct relationship between work satisfaction and performance, the relationship having the possibility of being inversely: an individual who gets to high performances consequently is going to be satisfied by his/her work (Judge et al., 2010), element taken into consideration in the previous analysis of the authors regarding evaluation of work performances (Saveanu, Osvat, Saveanu 2010: 706). Even though, motivating the employees is important for the managers for achieving organizational objectives, for creating a positive work environment, low absenteeism etc. (Mathis: 1997, apud Abrudan: 2009). Even though, it is important to keep the conceptual differences between work attitude, work satisfaction in subjective terms and work evaluation based on objective criteria, distinctions kept in the analysis in this paper (Weiss 2002).

In the present paper we are going to investigate the existing connection between work motivation types, work perception declared by the subjects and their effect on work satisfaction. The question to which we are trying to answer is: *to what extent does the work satisfaction level vary according to the following motivational factors: income, work position, freedom for decisions, occupations?* The data did not allow the investigation of the relationship between this and the aspects from the institutional level in which they are performing their activities, even though the theories present their relevance.

The second direction for investigating the attitudes toward work is a macro-social one, emphasizing the general social characteristics, the attitude towards work being a social indicator which can be aggregated to different levels (Seashor and Taber 1975). Most of the analysis in this category are connected to the rate of occupation, rate of unemployment, salary incomes,

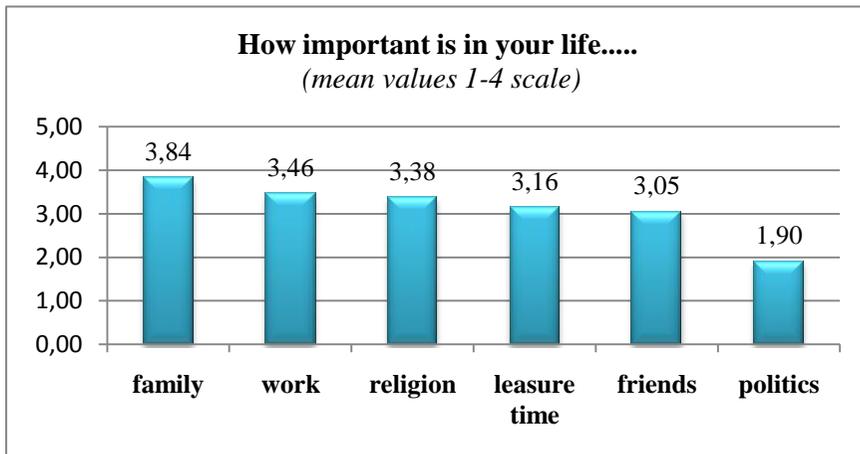
average period of work, fields of professional activity etc. This data is also completed by the subjective indicators of life quality, just like the perceived satisfaction regarding work, the value given to the job. These dimensions are the ones that build up the objective of the present paper. Thus, the comparative analysis between Romania and other European countries has revealed the fact that Romanians are generally less satisfied with the job, less sure regarding their job, a fact explained through the structure of the labor force and also through the rate of occupancy of the active population in our country (Ciutacu 2008: 59-108). Other factors that explain the work satisfaction degree of the Romanians are: age (young and old), education and occupation (those with a superior educational and/or occupational level are more satisfied) (Comsa, 2009: 1). The type of employment is also a factor that influences work satisfaction, the owners being the most satisfied ones according to a representative study on a national level (Comsa 2008: 46 - 48). These relationships are going to be tested in the present paper for highlighting the factors that influence work attitude and the degree of satisfaction on macro-social level, as social indexes of well-being and of development level. Nevertheless, the present analysis did not allow the comparison with the results obtained in these countries, being more an investigation on a national level of the aspects regarding work.

Data and methodology

The objective of this paper is the investigation of the variation of work valuing and of work satisfaction. For obtaining the results, I have used the data of the EVS 2008 survey. The 2008 research performed by the Romanian group for studying social values, sustained by the *Life Quality Research (ICCV)* Institute, had as objective the evaluation of the values' dynamics of the Romanians. The study is part of the surveys known as *European Values Study (EVS)* and has as objective the comparison of values between different European countries and the presentation of the evolution in time of the values' orientation (for more information regarding the EVS study in Romania, go to www.iccv.ro/valori). The representative sample for the Romanian population involved 1489 subjects. The structure of the sample is the following: distribution according to gender -51.8 women, 48.2 men, average age of 46.4 years, with a standard deviation of 18.3. The data has been processed by the authors by using the SPSS statistics software.

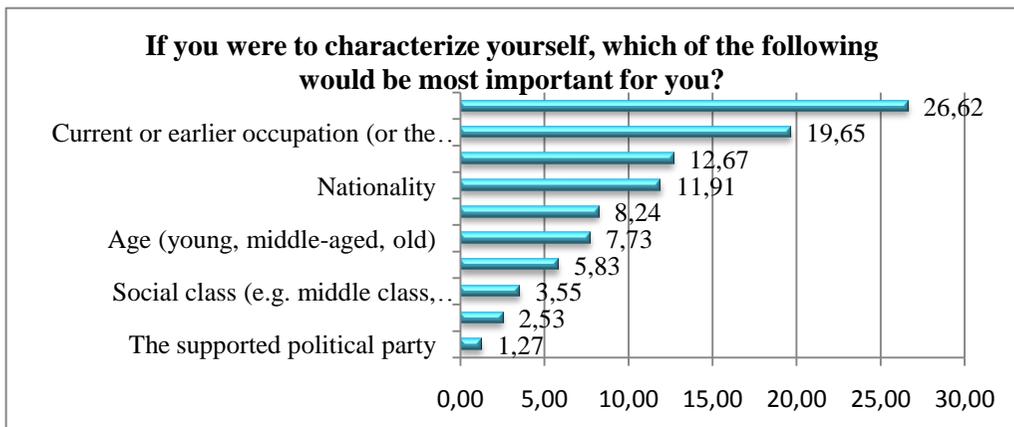
Results

Taking into consideration life as a whole, for the Romanian population, according to its importance, work is on the second place, the first place being allocated to family. This aspect shows that, in Romania, work is a desideratum, all the more so as the lack of work is one of the identified factors in previous studies as a determinant for social exclusion. Employing in professional life contributes to the satisfaction of the need for rising and to personal development of the individuals. A comparative analysis in European countries highlighted the fact that Romania belongs to the countries which value work the most, this appreciation presenting a constant trend in the last 20 years (Comsa: 2009).



Graphic 1. The importance of work attribution, made by the author, data source: EVS 2008

What is important to highlight regarding work appreciation is the fact that work represents one of the defining aspects of the individuals' identity. According to a research performed by the collective of the Sociology desk, University of Oradea (HURO 0801/180 ENRI), work does not only occupy an important place in the life of the individuals, but it also defines them as persons: the subjects answered the *Which is the most important thing that describes who you are?* question by 19% declaring (on the second place after family) that work is what defines them.



Graphic 2. Appreciation of the defining characteristics of social identity, made by the author, data source: ENRI 2010

Taking into consideration these aspects hereinafter, we are going to investigate which is the value given to work by the Romanians. The five items presented in the table below are in reference to the appreciation of the role and place held by the job:

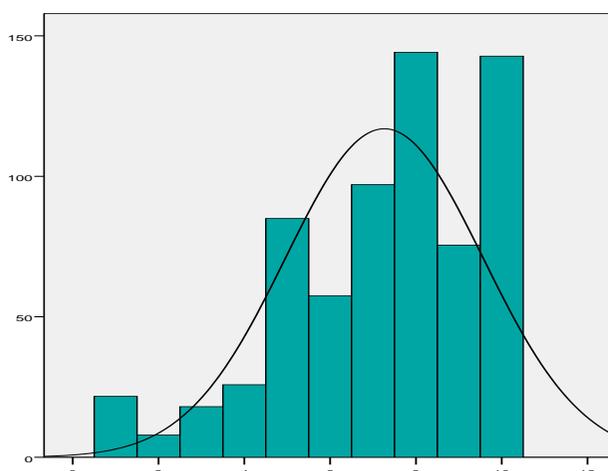
Table 1. Work appreciation (5 points scale: 1- totally agree, 5 – totally disagree)

	N		Average	Std. Deviation
	Valid	Missing		
You must have a job in order to make the most of your abilities	1453	39	1.77	,78
It is humiliating to receive money without working for it	1456	37	2.28	1.15
People who do not work become lazy	1436	57	1.98	,95
Work is a duty to society.	1429	63	2.47	1.14
Work always has to be on first place, even if it means less free time	1450	43	2.36	1.08

The centrality of work is also confirmed in the case of these items. Most of the individuals consider that work gives them the possibility to prove their abilities and keeps them active. The fidelity of the scale is thus confirmed (cronbach alpha>.700), by using the inverted variants of the items, we have developed the index for work appreciation, having an average value of 19.1. High index values show a strong valuing of work.

The analysis regarding the variations of the work appreciation index did not show specific characteristics of the individuals which determine different levels of the valuing of work. We had a positive correlation only in the case of age (Pearson coef. .166**, sig. 000), thus older people value work more. One of the possible explanations for the lack of significant relationships can be found in the way the scale has been built. It can be seen that the scale uses codes from 1 to 5, where 1 stands for a positive appreciation. Even though we used inverted values for developing the index, it is possible that the answers given to these items to be distorted due to the used codes (downward orientation).

Another way to interpret the lack of characteristics which determine the variation of the value given to work by the individuals is found in the subject of the measurement. The used scale measures the importance, the value of work and, as we could see in the first section of the paper, work is the most important after family. Thus, the appreciation of work's value does not represent different variations according to social-demographic characteristics of the individuals and their involvement in professional life. Also, the items use the word "work", word that does not directly refer to the job of the individuals, but rather to the involvement in different activities. Further on we have tested the identification of the characteristics which determine the variation of work satisfaction. Using the scale with values from 1 to 10 (1 - unsatisfied), the average value of work satisfaction is 7.26 with a standard deviation of 2.3. The previous comparative analysis place Romania on the 18th place from a total of 21 European countries, showing a lower level of satisfaction regarding work (see Comsa: 2009). Work satisfaction does not present significantly different variations according to age, gender and level of instruction of the individuals.



Graphic 3. Histogram Job satisfaction, data source: EVS 2008

The analysis show a higher degree of satisfaction in the case of subjects with a superior occupational level, both regarding the type of employment and what this implies: the level of incomes and work position.

The tested relationship between the degree of work satisfaction and the level of incomes shows the major impact of income over the work appreciation. Thus, one of the major criteria according to which a job is evaluated is the salary. The positive value of the correlation coefficient is of Pearson coef. .235**, sig. 000.

The difference is significant regarding the type of employment. The average value of work satisfaction is higher in the case of self employed individuals: 8.25, in comparison to the 7.29 average value obtained for those who are employed (F=9.7, sig<005).

Also regarding the type of employment, the Levene Test for the equality of the variance shows a significant difference regarding the number of subordinates an individual has. Thus, the average value of work satisfaction is higher for those who have subordinates, compared to those who do not have subordinates (7.91 in comparison to 7.17: F=6.31, sig<005).

Also, in the case of decision making freedom degree, the analysis identify a significant relationship. Thus, the positive correlation coefficient shows higher levels of work satisfaction if a job implies a high decision making power (Pearson coef. .572**, sig. 000).

Another aspect investigated by the paper deals with testing the relationships regarding the type of professions. For coding the professions, the *Classification of Professions from Romania 2011* (COR) was used, recoding the professions in the database on the 10 major occupation group: (1) Members of the legislative body of the executive, heads of public administration, superior chiefs and officers from economical-social and political units; (2) Specialists with intellectual and scientific professions; (3) Technicians, fitters and assimilates; (4) Administrative officers; (5) Operative agents in services, commerce and assimilates; (6) Farmers and qualified workers in agriculture, forestry and fishing; (7) Craftsmen and qualified workers in crafts, adjustment and maintenance of machines and installations; (8) Operators for installations and machines and assemblers of machines, equipment and other products; (9) Unqualified workers; (0) Army forces. The analysis shows significant differences in case of intellectual professions and administrative officers. Thus, the average value of work satisfaction in the case of subjects with intellectual professions is higher in comparison to the average value of the other occupations (8.00 in comparison to 7.20: F=4.26, sig<005). Regarding administrative officers, the average value of work satisfaction is 7.73, compared to 7.15 recorded for the other professions (F=5.56, sig<005). These results are consistent with the average levels of salaries for these professional

groups: the second salary level group is represented by the intellectual and scientific professions, thus it is possible that the obtained significant differences to also come from the income differences of these (INS, 2010).

Final discussion

The analysis presented in this paper contributes to the larger understanding of the work motivations and satisfactions of the Romanians, as an index of both well-being and of development level. In the same manner as other studies regarding this issue, I have shown that for the Romanians, work is a very important dimension, second after family, the professional status being an important criteria in shaping personal identity. The analysis regarding work valuing, with other words the role of work, sustains the conclusion that this represents an essential dimension of life, even if it is important to draw a line between involvement in professional life and involvement in different other activities outside work.

These results generated the analysis performed in the following section, the investigation of work satisfaction level of the Romanians. Their conclusion shows the fact that, even if work by itself is considered as being very important, satisfaction is connected to incomes, chief status, self-employment, high decision making power, intellectual and administrative professions - all of these showing a superior occupational level.

Further investigations are necessary for testing the direction of determination between work satisfaction level and achieved performances. For these, it is necessary to obtain information regarding the type of employer, work relationships and other institutional level indexes. This way, the individual level is averaged to the macro-social one, making generalizations possible.

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ASPECTS OF SERVICE QUALITY AND ECO LABELLING OF ROMANIAN LODGING SERVICES

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Tourism has a significant environmental, economic and socio-cultural impact, which makes it important for environmental initiatives.

The Rio Earth Summit (1992) was a milestone for these initiatives, having introduced the concept of sustainable development, its major principles and recommendations of implementation. So, the ecological movement grew globally more and more by widely disseminated actions among various bodies such as governments, associations, businesses, academics, NGOs and communities.

In the European Union eco-labelling scheme, is “a voluntary initiative to promote products and services which have the potential to reduce negative environmental impacts, as compared to the other products and services in the same product or service group, thus contributing to the efficient use of resources and a high level of environmental protection. This shall be pursued through the provision of guidance and accurate, non-deceptive and scientifically based information to consumers on such products and services”. In fact this is official approach known as EU-Ecolabel Scheme, launched in 2005.

In general, the idea of sustainable development, and eco-attitude of many of the activities carried out in different economic sectors have been encouraged to be certified, and to adopt sustainable practices to improve their environmental practices, and to inform and educate their clients regarding their friendly-environmental policies. The tourism sector adopted all of these.

One by one in hospitality industry have emerged new trends, new destinations. Some of these trends are as well connected to environmental policy, eco-initiatives that certify EMS (Environmental Management System) and to use of eco-label in hospitality industry.

For years, the tourism sector in Romania was declared a strategic sector. Within this framework, we decided to examine this area, the specific topic of eco-labelling and quality of lodging services in Romania.

This paper proposes a short examination by observation of studies dedicated to lodging eco-label services and their quality based on a comparative analysis between Romanian supply of tourism "green services" and international one.

This study has as a result a synthetic perspective on eco-label services and some aspects on the state of art of this topic in Romanian and international context of lodging services.

Keywords: environmental policy, environmental management system, tourism, lodging services, quality of services, eco-labelling, Romania.

JEL Code: Q5, Q57, L15, L83

I. Introduction

The purpose of this paper is to examine and to present a short synthesis of literature, which is indicative of the quality and importance of factors which may lower the environmental impact during tourist product life cycle. The main focus is on lodging services / hotels which adopt a pro-natural and eco-label use (**EU-Ecolabel**), while examining the eco-labelling initiative in contemporary Romania⁷².

⁷² http://ec.europa.eu/environment/ecolabel/about_ecolabel/revision_of_ecolabel_en.htm

All products and services have an impact on the environment from one or all stages of their life cycle, starting during the extraction of raw materials, then going through the design, manufacture, assembly, marketing, distribution / sale, ending the use of and / or final disposal as waste⁷³.

The **Rio Earth Summit** (1992) was a milestone for organic initiative, with the concept of sustainable development as its major principles and recommendations for implementation, and in recent years the movement has grown more and more.

In general, **sustainable development initiatives**, eco attitude and many activities in different economic sectors have been encouraged to be certified and such practices have been adopted to improve environmental practices, along with informing and educating the public about the environmental friendly policies.

Tourism has a great impact on the environment during its life cycle. The concept of "sustainable development" has been extended in this area, and the term "**sustainable tourism**" is becoming more present. The tourism sector has adopted these practices and initiatives. In the hospitality industry new trends have emerged, new destinations. Some of these trends are very well connected to **environmental policy, initiatives and eco-certified EMS** (Environmental Management System) and use eco-labelling in the hospitality industry. Higher levels of income cause consumption of goods and services so that they reach unsustainable levels that threaten the natural resource depletion. The Annual Report 2004 [1] of the World Watch Institute⁷⁴, which focuses on consumer society, states that currently there are certain goods and services that have long term consequences for human wellbeing and the planet.

During its life cycle phases, tourism interferes with the environment, having a significant impact on natural habitats, urban environment, etc. The relationship between tourism and the environment is complex, because these two factors are interrelated. Fundamental principle regarding a friendly environment and quality tourism is axiomatic in ecology, and sustainable development from the viewpoint of the organizers (tour operators, hoteliers etc.), and partly to a proper use of the facilities from the point of view of tourists.

The court must first consider the effects of tourism on the environment, exploiting resources, but also by locating tourist structures (natural attraction of the area where a hotel is located is very important, so it is essential to be monitored and protected).

Many tourism-related activities directly or indirectly have an impact on bio-diversity.

Natural areas are affected, sometimes damaged by the arrangement of tourist facilities and the presence of tourists can destroy the local flora and fauna. It appears possible that environmental pollution and the use of large quantities of water contribute to desertification.

Attention should be focused on different phases of activity, which if they have been identified as environmental hazards, must be dealt with by proposing solutions that take into account the following objectives⁷⁵:

- Major tourism operators;
- Education for Eco-living;
- Minimizing the impact of integrating environment and saving resources structures;
- Promoting and supporting responsible tourism;
- Protect the beauty of the countryside and biodiversity;
- Reduce production costs;
- Reducing waste.

For years, the tourism sector in Romania was declared a strategic sector. In this paper, we decided to examine, in the light of these assumptions stated above and in a comparative manner,

⁷³ World Resources Institute -Global Ecolabel Monitor – 2010 http://pdf.wri.org/2010_global ecolabel_monitor.pdf

⁷⁴ http://en.wikipedia.org/wiki/Worldwatch_Institute

⁷⁵ Inițiativa VISIT: <http://www.ecotrans.org/visit/brochure/fr/100.htm> și <http://www.istaygreen.org/>

the relationship between eco-labelling and the situation of lodging services in Romania as compared with other countries.

II. Hospitality and the natural environment

Interest in an area is always in close contact with expectations of attracting more and more tourists, so hoteliers can recover the money invested. Most of the investors' interests often conflict with environmental interests. Investors tend to prefer quantity over quality. The result is a structure which continuously affects the environment, even in some ways it changes the socio-cultural elements. Do not forget that each tourist site has a different level of tolerance (number of tourists visiting an area, following a lifestyle), so operating over the limit can create environmental changes, compromising its appeal. In the tourism industry through the tourist-hotel relationship, sustainable development became a priority, which is achieved via careful application of new environmental management tools. Most environmental management systems are geared towards sustainable development and their application in the hotel industry is increasingly required, by its stated objectives and the instruments used to conduct a series of advantages (saving resources, prevent pollution, lower costs, attractiveness a particular segment of consumers, etc.).

Hospitality is an activity with a wide variety of high resource consumption, which requires environmental impact and hence the need to protect the environment.

In recent years, several studies have shown that people/tourists are more cautious to the environment, but also feel the need for a formal attestation of 'quality hotel', which is achieved through certification. Operators' interest in the industry stems from the need to differentiate the quality of services from those traditionally offered on the market. Quality must be certified. There is a tendency to amplify the importance of certification in accordance with standards of ISO 14000 and the Environmental Management and Audit Scheme EMAS and EU-Ecolabel.

Thus, the hotel business moves towards the introduction of environmental management tools, tools that are more credible and visible because they operate on an international level and are publicly recognized. **Applying the principles of EMS and its implementation is helping the hotel management to establish and assign responsibilities to motivate staff to implement best practices and monitor performance.**

At present, there are numerous national initiatives, even if, at first, they were strictly voluntary initiatives, and some operators have launched their own regulations and thus codes of conduct, guidance, quality label for tourist-oriented environment and structure arose.

One example is an Italian initiative, known in Italy as environmental label Jesolo, respectively and Green Hotel Riccione tags for the environment, but these initiatives have official recognition, so there is the risk of this kind from his own declaration of intent public hotels.

In the **hotel business these initiatives are likely to improve the quality**, the use of the following measures:

- a) Use of compatible eco-products (e.g. use clean products whose quality was recognized by certification and EU-Eco-labelling; or by national eco-labels instead of traditional).
- b) Streamlining services so that improvements to services may include either new technology or a better organization. Examples with optimization:
 - Discovery of loss or defects;
 - Flexible change of linen;
 - Reducing laundry costs by using paper products production;
 - Installing soap dispensers;
 - Use energy saving bulbs with low energy consumption;
 - Use of alternative sources of energy for water heating / solar panels);
 - Using sensors to turn on water and light;

- Electrical devices that operate with magnetic keys;
- Reducing the purchase of products such as soap, useless decoration;
- Increased use of recyclable packaging;
- Adoption of environmental criteria, etc. supply.

However the problem of protecting the environment should allow the service level offered in the hotel to remain high and to ensure customer satisfaction.

Practice shows that it definitely would be easier if the customer/tourist should be sensitized on the issue and would also become involved. The idea that the customer should be informed about the initiative taken by the hotel for environmental protection, might lead to cooperation between the two.

There have been studies aimed at discovering the criteria necessary for obtaining EU-Ecolabel environmental quality label.

These studies were based on the analysis of tourist services offered by hotels in the phases of life cycle.

In terms of life cycle phases of the environmental service that ought to draw the interested customer's attention are those foregoing the services (site and buildings) and the actual service. Location is considered important, except that, in general, when it comes to private operators, they often neglect this aspect in particular, something which should be evaluated during the planning phase through an environmental impact study.

The actual service stage is divided into elementary activities grouped into product life cycle phases of hotels, with relative impact on the environment; the impact of each of these phases on the environment and proposals for improvement can only be assessed once an overview of the whole stage exists.

III. Eco-Labeling the Hotels

In the European Union (EU) we note a modern trend of following "a voluntary initiative to promote products and services that have the potential to reduce negative environmental impact compared with other products and services in the same group of services, there by efficient use of resources and a high level of environmental protection. This is done by providing guidance to consumers and accurate, fair and scientifically based on such products and services" (**EU-Ecolabel Scheme**)⁷⁶.

The EU-Ecolabel is considered to provide certain economic benefits, as well as competitive aspects of differentiation and has a positive image in this area, outlining certain advantages when used [HoraBlaga A. 2010, 256]. In fact, eco-labelling:

- Is an internationally recognized collective mark;
- It may be a marketing tool promoting image quality, addressing certain segments of consumers;
- Is developing an environmental strategy that proposes to change consumer behaviour in the sense of environmental protection is increasingly sought.

Eco-label is granted for products and services with reduced environmental impact. "EU-Flower" is a distinctive sign recognizable at European level [Serbulescu L. 2005, 165].

Quality Certification is more increasingly common practice; even in tourism, it is presented as certification according to ISO 9000, ISO 14000, ISO 22000 etc. standards. However, for several years, lodging and restaurants were adapting to the market demanding certification of higher quality, and started following the ecological trends and their desire to modernize according of new standards. For this reason, we are witnessing a proliferation of brands in order to certify the

⁷⁶ Present the ecolabel of various eco business /products:<http://www.ecolabelindex.com/ecolabels>, for tourism sector:
http://www.ecolabelindex.com/ecolabels/?search=turism&as_values_032= for hotels:
http://www.ecolabelindex.com/ecolabels/?search=hotel&as_values_023=

environmental management system facilities relatively more countries. Germany, Denmark, Austria, USA, Italy.

Regulation no. 1980/2000 approved by Parliament and the Council reviewed the first EU-Ecolabel criteria, and is now expanding its scope and tourism focusing on all the hotel business. The hospitality industry is interested to certify that an accommodation meets some conditions within the rules of low environmental impact (use of renewable resources, has a waste collection system, etc.).

More specifically this kind of label can be applied to hotel units, provided in particular those related to improving the quality of service provided by the hotel relative to where⁷⁷:

- Tourism demand is sensitive to environmental issues;
- Service providers are concerned about the environment and potentially interested in using eco-label;
- Series of five standards (ISO 14020 -14024) are dedicated to eco-labelling activities (Environmental labels and declarations)⁷⁸;
- Increasing interest in using eco-labels when the competitive advantage obtained by using labels, creates a chain effect of copying, the market should continue to encourage permanent improvements;
- Lodge/hotel operators sensitivity to environmental issues can be measured by the presence of policy, instruments and methods oriented to protect the environment;

The first specification for environmentally friendly tour operators, accommodation establishments and various tourist spots in 1991 was the brand / logo Green Suitecase / Der Grune Koffer created in Germany by Ökologischer Tourismus in Europa e.V⁷⁹ (OTE) to provide the tourism sector, a mark similar to Blau Engel⁸⁰ used for industrial products in 1978; now, the German mark used for ecological tourism is Viabono. There are other initiatives of this kind in Denmark (Den Gronn Nogle⁸¹ The Green Key & Destination 21⁸²), USA (for 18 years, the Green Hotel Association⁸³), Austria (Das Österreichische Umweltzeichen Tourismusbetriebe seal⁸⁴), Italy (Legambiente Turismo⁸⁵), Portugal, the Netherlands (Milieubarometer /Green Key), Estonia and Sweden (Den Gronn Nogle) Nordic countries: Sweden, Norway, Iceland, Denmark, Finland (Nordic Swan⁸⁶), France (La Clef Verte⁸⁷), Estonia (Estonian ecotourism Quality), Switzerland (Stainbock⁸⁸), United Kingdom, Ireland and Scotland (The Green Tourism Business⁸⁹), Hungary (1994-Hungarian Ecolabel/Környezetbarát Termék Védjegy⁹⁰).

At this moment it may access Ecocolabel Index⁹¹, a database which lists 25 sectors, 377 eco products and services category, out of 211 countries, of which numerous are national, regional and global, including 44 dedicated to strictly eco-tourism.

⁷⁷ Manual for accommodation services eco-labelling http://ec.europa.eu/environment/ecolabel/ecolabelled_products/categories/pdf/appack_0904.pdf

⁷⁸ http://www.iisd.org/business/markets/eco_label_iso14020.aspx

⁷⁹ <http://www.oete.de/de/oete.html>

⁸⁰ <http://www.blauer-engel.de>

⁸¹ <http://www.green-key.dk/>

⁸² http://www.cic-wildlife.org/uploads/media/Dest.21_-_a_labeling_scheme_for_tourist_2001_eng.pdf

⁸³ <http://greenhotels.com/index.php>

⁸⁴ <http://www.umweltzeichen.at/cms/home233/content.html>

⁸⁵ <http://www.legambienteturismo.it/>

⁸⁶ <http://www.nordic-ecolabel.org/>

⁸⁷ <http://www.laclefverte.org>

⁸⁸ <http://www.oe-plus.ch/>

⁸⁹ <http://www.green-business.co.uk/>

⁹⁰ <http://www.kornyezetbarat-termek.hu/>

⁹¹ <http://www.ecolabelindex.com/ecolabel/eu-ecolabel>

As noticed in the literature, around 2001-2004 an increasing Eco-labelling trend appeared; in the year 2004, the total number of accommodation units labelled with the EU-Ecolabel was 20, while in the year 2010, there are hundreds across Europe, and thousands in the world.

Since 2002 in Romania, in accordance with EC Regulation no. 1980/2000 Eco-labelled Schemes and European Community eco-label criteria for product groups, the necessary legislative framework for eco-labelling was created and was valid until EU accession when Romania took all legal regulation and procedures of EU.

In year 2009⁹², in Romania a number of 1170 hotels were functioning, of which only two were eco-labelled (representing 0,17% of the total)! We consider this result extremely modest, in spite of an existing legal framework, and also although there are professional concerns in this area. In 2009 we can identify the initiative of the Romanian Green Building Council (RoGBC)⁹³ that is interested to sustain this type of policy, beside NGOs aware of ecological aspects concerning tourism.

We note that the first hotel was certified only in 2008, when Hotel Saturn from the same name sea-side resort on the Black Sea. This was the first accommodation certified unit as green in Romania, and received the Eco-label from the Tourism Ministry at that time. After a year, another was certified; this is Vega Hotel in Mamaia, also on the Black Sea. Vega Hotel in Mamaia has been tagged by TUV Reihart and is the first hotel in Mamaia aligned to the European Eco-Hotel Management System standard⁹⁴.

The hotels have been awarded and certified, which demonstrates that they are trying to protect the environment using eco-friendly technologies, products etc. We remark that with only two eco-labelled hotels in Romania, this is a very modest result!

There is a procedure with 84 mandatory and optional criteria to be met in a proportion of 30%. In general, the criteria focus on reducing energy consumption, the reduced use of chemicals and selective waste collection, waste minimization, recycling and reuse of some resources/waste.

The objective of those who adopt this mode is to be a model for communities, consumers and other businesses.

IV. Conclusions

The presence of specific conditions that support the use of the EU-Ecolabel is linked for example to techniques adopted by hotels, and these able to improve the environment, besides economic and commercial opportunities for those lodging units who qualify as environmental quality.

Inclusion of EU-Ecolabel for the tourist facilities in a wide program of sustainable tourism, such as those for environmental management, namely in general EMAS, and/or in particular according to standards ISO 14000.

The ability of tourism operators to promote environmental protection and conservation is one of the main objectives of the job. This is a strong point of interest in business development and competitiveness.

Undoubtedly, the use of environmental labels increases the visibility of the business, and tourism Eco-labelled services can be seen by operators, as well as hoteliers as a positive thing, but only if it is accompanied by economic, competitive and commercial advantages that can add value to this initiative.

⁹² Breviar statistic 2010 http://www.insse.ro/cms/files%5Cpublicatii%5Cbreviar%20turism_2010.pdf

⁹³ <http://www.rogbc.org/en/home>

⁹⁴ <http://www.ecomagazin.ro/info/hotel-eco/>

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MANAGING RENEWABLE ENERGY IN THE EU10 REGION

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The problems of renewable energy and regional development have gained a global dimension, as well as the concerns about the economic growth. Therefore, this study investigates the issue of managing renewable energy in the EU10 region, within the context of recovery and anticipated growth of the region. The findings of this study disclose that an important source of economic growth in the EU10 region's countries may be to start some new investments in renewable energy. In order to develop the field of renewable energy may be used EU funds, and may be envisaged different public-private partnership models, that may contribute to lower societal costs and increased deployment rates. The study was conducted by combining a wide variety of sources, such as statistics, reports and articles. The results reported in this study could be used for further research in the area of implementing green energy projects in the EU10 region. Another direction for further research could be to identify the most attractive countries for different renewable energy investment projects in the EU10 region.

Keywords: renewable energy, EU10 region, regional development, investment, economic growth

JEL Classification: Q42, R11, O30, M10.

1. Introduction

Nowadays all European regions are interdependent in terms of guaranteeing energy supplies, creating stable economic conditions and effectively combating climate change. All actors are playing an essential role in managing this change, at local, regional, national and European level. The aim of this paper is to reveal the issue of managing renewable energy in the EU10 region, within the context of recovery and anticipated growth of the region.

The research was conducted using a wide variety of sources, such as statistics, reports and articles. The research question was answered by analyzing published sources, evaluating and interpreting evidence.

2. Recovery and anticipated growth in the EU10 region

The EU10 region includes the eight Central European countries that joined the EU in 2004 (the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, the Slovak Republic and Slovenia), as well as the two countries that joined the EU in 2007 (Bulgaria and Romania).

The global financial crisis has harmed the supply potential of the EU10 economies. The credit constrains and higher risk aversion have lead to lower capital flows, restrained investment, possibly higher structural unemployment and lower total factor productivity growth (The World Bank, 2011a: 22).

In early 2011, about two and a half years after the global financial crisis broke, economic output in the EU10 region had returned to the pre-crisis level. The annual growth rates in the EU10 region in 2008-2010 timeframe is illustrated in figure 1. The pace of the recovery differs across the EU10 region, reflecting, among other factors, the overheating prior to the crisis, trade openness and competitiveness.

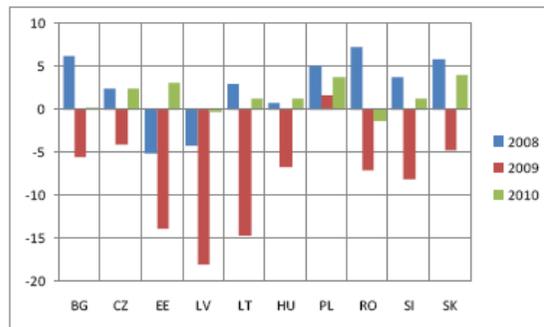


Figure 1 Annual growth rates in the EU10 region, year-on-year, in percent
(Source: The World Bank, 2011a: 6)

The recovery was mainly driven by external demand, while domestic demand was restrained by weak labour market conditions, higher commodity prices, and fiscal policy. The biggest growth improvements in 2010 were experienced by the countries with the most significant overheating prior to the crisis and largest contractions in 2009, such as Latvia, Estonia and Lithuania. As a result, growth differences across the EU10 region narrowed from almost 20 percentage points in 2009 to just over 5 percentage points in 2010. Nevertheless, country differences remained important. Three countries expanded by 3.1 percent or more: Estonia and the countries with limited pre-crisis imbalances, namely Slovakia and Poland. Strong restocking was supported by solid net exports in the case of Slovakia and Estonia, and by consumption in the case of Poland. The growth varied between 1.2 percent and 2.4 percent in the Czech Republic, Hungary and Slovenia where was supported by restocking and in Lithuania where was supported by very strong restocking. Growth remained close to zero in Bulgaria and negative in Romania and Latvia in light of weak consumption and even weaker investment (The World Bank, 2011a: 5). Further structural reforms can help to boost potential growth and facilitate the large fiscal consolidation (The World Bank, 2009).

The contribution to gross value added (GVA) growth in the EU10 countries (figure 2) shows that the accelerating growth in the EU10 region during 2010 came with a broadening of growth across sectors.

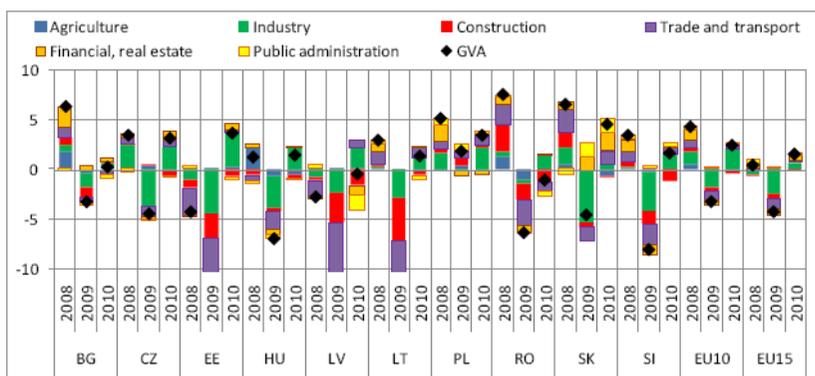


Figure 2 Contribution to GVA growth in the EU10 region
(Source: The World Bank, 2011a: 5)

The double-digits growth of industry reflects the rebound in global demand for capital goods and durables and the deep integration with European production chains (The World Bank, 2011a: 4). However, in some EU10 countries the growth spread to finance and real estate and strengthened

trade, hotels and restaurants, and transport, while public administration and community services remained subdued due to fiscal pressures across the region.

For the timeframe 2010-2012 firms are expected to raise investment with higher capacity utilization and strong global demand for capital goods and durables, and households to step up consumption with improving confidence about future prospects (The World Bank, 2011a: 2). Therefore, the projected gross domestic product (GDP) growth rates (figure 3) may be about 2-4 percents for some of the EU10 region’s countries, and more than 4 percent for other of the EU10 region’s countries in 2012.

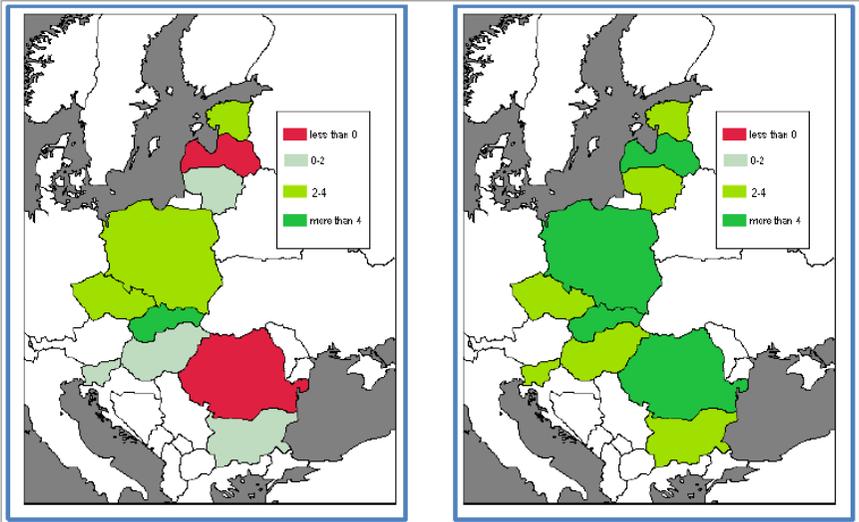


Figure 3 Projected 2010 and 2012 GDP growth rates in the EU10 region, percent
(Source: The World Bank, 2011b: 8)

The analysis of the anticipated growth in the EU10 region (figure 4) reveals that Slovenia, the Czech Republic and Hungary may have a growth somewhat less than elsewhere in the region. The growth in these countries could increase to about 2.5 percent to 3 percent by 2012. One reason for this increase may be that these countries have already converged more to EU income levels (The World Bank, 2011a: 21).

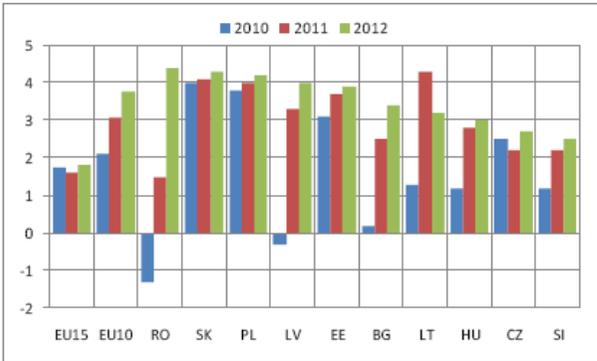


Figure 4 Anticipated growth in the EU10 region
(Source: The World Bank, 2011a: 22)

On the other hand, according to The World Bank (2011a: 21) the pace of the recovery in Slovakia and Poland is set to remain solid due to limited pre-crisis imbalances, strong integration in European production networks, EU funds, and, in the case of Poland, stable consumption. In

Estonia, Lithuania and Latvia growth could improve to about 4 percent by 2012 as domestic demand continues to recover. Aside from Latvia and Lithuania, Romania and Bulgaria, where the crisis hit later than elsewhere, are set to see the biggest improvements in growth in 2011.

In particular, the recovery of the Romanian economy may last more than expected. The Government of Romania is confronted with the difficult challenge of reconciling three objectives: to protect priority programs for economic and social development in order to enhance growth prospects and to mitigate the social costs of the economic crisis; to exit from anti-crisis policies and ensure fiscal consolidation once the recovery is under way in order to make room for a private sector led recovery; and to improve policies, regulations and coordination in order to prevent such crises in future (The World Bank, 2009).

An important source of economic growth in the EU10 region's countries may be to start some new investments in renewable energy.

3. Managing renewable energy's development in the EU10 region

The ambitious European 2020 targets on energy and climate, and more particular for renewable energy, request an important mobilization of investments in the coming decade (ECOFYS, 2011: 143). Before the financial crisis of 2008, several electricity-importing countries in the EU10 region had begun to experience difficulties with supply, but the crisis has reduced demand and created some breathing room. In addition, the crisis created the opportunity to take action to mitigate the impact of the anticipated energy crunch. Mitigating actions are required on both the supply side and the demand side and will require significant investments if the region wants to meet all its anticipated energy needs. This level of investment cannot be provided by the public sector alone and measures will be required to create a climate that appeals to private sector investors (The World Bank, 2010: 1).

There are some investment funds at the European Union's level, of which some may be used in order to develop the field of renewable energy. Through the European Regional Development Fund (ERDF) and the European Social Fund (ESF), otherwise known as the Structural Funds, as well as the Cohesion Fund, investments can be made in thousands of projects across all Europe's regions, with the aim to promote economic and social cohesion by reducing the disparities between Member States and regions. With a budget of €347 billion for 2007-2013, Cohesion Policy represents the single largest source of financial support at the European Union's level for investment in growth and jobs, designed to enable all regions to compete effectively in the internal market (European Commission, 2009: 1). The financial allocations through the Cohesion Policy for energy efficiency and renewable energy in the EU10 region are illustrated in figure 5.

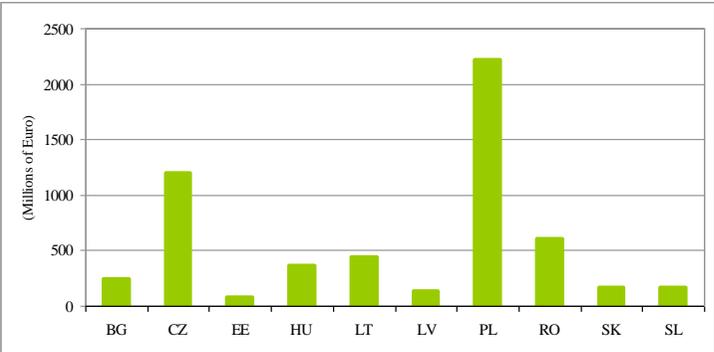


Figure 5 EU funds for energy efficiency and renewable energy in the EU10 region (Source: Adapted from European Commission, 2007)

As the challenges faced by Europe's regions have changed over time, so has changed the policy. Against a background of momentous change in the Union as a result of enlargement and of increasing globalisation, concerns about energy supplies, demographic decline, climate change and more recently, world recession, the policy has evolved, as a key part of the response to meet these new realities (European Commission, 2009: 1).

Governments have a major role to play in energy efficiency, by allowing energy tariffs to reflect costs, and also by being proactive in setting and updating energy efficiency standards for homes, equipment, and vehicles, and in enforcing them. Some measures that may be taken by governments may be carrying out energy efficiency programs in the public sector, informing the public on energy efficient technology options, and designing cities with alternative means of transport (The World Bank, 2010: 3).

The investment in energy efficiency can often give a major boost to local industries (for instance, the restoration of buildings). While regional energy strategies are implemented in the context of European integration, the role of regions as economic players is also becoming increasingly important and therefore, regions must work to create an overall framework which is conducive to action (Frant and Minica, 2008: 2). The deployment of most renewable energy technologies still needs both financial and non-financial policy support, due to the stage of development of either technology or market, and due to fact that renewable energy sources still do not have the same playing field as conventional energy technologies (ECOFYS, 2011: 143).

A key priority of the policy makers is to secure the funding to meet the region's future energy needs. However, the countries of the EU10 region also need to ensure that in developing their energy strategies and in implementing their investment programs they act in an environmentally responsible fashion (The World Bank, 2010: 4).

In case of the large-scale projects (that require investments of 50 M€ or more), with significant technological, regulatory, or market risks, government involvement/participation may help to establish financial close at lower cost of capital. In order to address this issue, different public-private partnership (PPP) models can be envisaged, and may contribute to lower (societal) costs and increased deployment rates (ECOFYS, 2011: 148).

4. Conclusions

This study has revealed that in early 2011, about two and a half years after the global financial crisis broke, economic output in the EU10 region had returned to the pre-crisis level. However, the pace of the recovery differs across the EU10 region, reflecting, among other factors, the overheating prior to the crisis, trade openness and competitiveness. The projected gross domestic product growth rates may be about 2-4 percents for some of the EU10 region's countries, and more than 4 percent for other of the EU10 region's countries in 2012. Firms are expected to raise investment with higher capacity utilization and strong global demand for capital goods and durables, and households to step up consumption with improving confidence about future prospects.

Another conclusion of this study is that an important source of economic growth in the EU10 region's countries may be to start some new investments in renewable energy. The ambitious European 2020 targets for renewable energy request an important mobilization of investments in the coming decade, which cannot be provided by the public sector alone and therefore measures will be required to create a climate that appeals to private sector investors. In addition, EU funds may be used in order to develop the field of renewable energy, and different public-private partnership models may be envisaged, and may contribute to lower (societal) costs and increased deployment rates.

The results reported in this study could be used for further research in the area of implementing green energy projects in the EU10 region. Another direction for further research could be to

identify the most attractive countries for different renewable energy investment projects in the EU10 region.

Acknowledgments

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SUB-SECTION: MARKETING

STUDY REGARDING STUDENTS' SATISFACTION WITH INSTRUCTIONAL PROCESS AS A DIMENSION OF ACADEMIC PERFORMANCE OF INSTITUTIONS OF HIGHER EDUCATION

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Economic education in Romania has gone through many changes in recent years, in order to modernize and adapt to the requirements of the economy based on knowledge. But, regardless of the stage, students' satisfaction is a key criterion for assessing the relevance and the accomplishment of the mission of universities in society. The highest satisfaction should be a constant concern for managers of higher education institutions. In order to achieve this goal, it is very important to periodically determine which are the most significant factors for students, how satisfied are they and which is the performance of the higher education for these attributes. The knowledge transfer process and the degree to which we can speak of a modern university tailored to the needs of the business environment and focused on increasing the relevance of the educational process for the labour market can be appreciated taking into consideration the content of the educational activities. The objective of this research is to identify relationships between the importance, satisfaction and performance of the instructional process in the process of improvement of the university management and the creation of better university programs. Our analysis was based on an empirical research conducted in a major Romanian faculty in the field: Faculty of Economics and Business Administration of Cluj-Napoca. The research was carried out by means of the survey method using quota sampling. Findings have revealed a significant positive contribution of the assessed factors to the increase of the quality of educational process. Also the factors that characterize the instructional process are correlated. The results revealed students' concern to acquire practical knowledge. There is also a significant difference between students' expectations and students' satisfaction regarding the quality of the content of teaching activity. Unfortunately, in case of all factors the performance of institution was negative associated with a number of negative effects.

Keywords: institutions of higher education, educational management and marketing, quality of educational services, student satisfaction, instructional process.

JEL Classification: I21, I23, M39

1. Introduction

Brătianu and Pop (2007:9) stated that even if the educational management and marketing in Romanian universities aren't a novelty, the instruments used are often simple or inappropriate. In the present context, both the Romanian universities and companies face the same problems (Pop, et al. 2009: 215): establishing a connection with the environment, raising resources, developing and providing quality services that contribute to the social welfare of the community, attracting

new customers and building their loyalty, maintaining a good image, fighting the intensifying competition and so on.

The competition in the current educational environment is intense due to the internationalisation of education and the impact of information technology and communications. Given the present context of global economy, the situation is even more dramatic in the case of the economic education. This competition profoundly affects one (but not the only one) essential components of a university mission: the learning process, the essence of the educational process, focused on knowledge transfer and creation of skills and competences usable in the labour market. The degree to which we can speak of a successful university can be determined through the overall satisfaction felt by its main category of public, namely the students, taking into consideration the content of the educational activities. This element along with the evaluation process and the quality of the human resources represent the main components of the instructional process and thus their evaluation is the first step to develop better educational programs.

2. Literature review

In order to provide educational services at the European Union level, the Romanian institutions of higher education must improve the educational management and marketing practices, especially given that the percentage of the budget funded by universities and students increased. (DesJardins 2002:531).

The increasing competition among universities, the decrease in government funding, the students' expectations increase and the general decline in birth rate have led to the awareness of the importance of providing quality educational services in order to retain a sufficient number of students with high abilities (Canic and McCarthy 2000: 41; Li-Wei 2005: 863). Researches show that student's satisfaction is the factor that contributes most to students' loyalty (Helgesen and Nettet 2007:51; Brown and Mazzarol 2008:90). Student satisfaction is defined by Elliot and Healy (2001: 2) as "a short-time attitude resulting from an evaluation of a student's educational experience" which occurs when the current performance meets or exceeds the student's expectations (Parasuraman, Zeithaml and Berry 1985: 42). Research undertaken by Munteanu et al. (2010: 138) had also shown that the most important satisfaction factors are different in case of students with low and high performance.

Hishamuddin et al. (2008) stated that there is a positive correlation between the quality of educational services and student satisfaction, thus the improvement of the services can lead to higher satisfaction. Aldridge and Rowley (1998:202) have found that students' dissatisfaction affects the learning process leading to low performances or even to abandonment of the studies. The necessity to determine students' satisfaction in order to improve the education management was confirmed by Carey, Cambiano and De Vore (2002:97) which found that higher education managers are rarely focused on determining students' satisfaction and believe that the satisfaction level is higher than the real one.

3. Study objectives and methodology

The main objective of the study, namely identifying the current situation of the economic higher education in Romania by evaluating its empirical dimension and its relevance for the labour market and using the satisfaction of those directly concerned with these issues - the students, in order to create more performant educational programs. Strongly connected with the main objective of the paper (and subsidiary to achieve it) we considered also important to study the following aspects:

- O1. Identifying the performance of higher education institutions as difference between student's expectations and perceived value of received services.

- O2. Identifying the main factors that contribute to the satisfaction with the instructional process.
- O3. The contribution of the satisfaction with the instructional process to the overall satisfaction with the economic higher education.

This research was carried out by means of the *survey method using quota sampling* (year of study, line of study, specialization). It employed the interview technique while the questionnaire was the instrument of data gathering. The study was conducted on a sample of 490 students enrolled at the Faculty of Economics and Business Administration of the „Babeş-Bolyai” University of Cluj-Napoca. The hypotheses of the study were:

- H1. There are several significant differences between the expected level of the factors specific to the educational process (represented by importance) and the perceived value from the educational experience (represented by satisfaction).
- H2. The factors contributing to students’ satisfaction with the instructional process are highly correlated.
- H3. There is a dependency relationship between the factors which influence the instructional process and the overall satisfaction, all these elements significantly influencing the relevance of the educational process.

The evaluation of the educational process in terms of its empirical character, adapted to the requirements of the society as a starting point for development of performant economic educational programs, focused on the labour market needs, was carried out through one dimension of educational experience: the content of the teaching activity, which contains eight items. Students were asked to evaluate their academic experience by comparing the importance of the considered factors and their satisfaction with these factors using a six-point scale, ranging from (1) “not at all important” to (6) “very important” and from (1) “not at all satisfied” to (6) “very satisfied”. It has also been determined the “satisfaction with the instructional process” and the “overall satisfaction with the educational experience” using same scale.

First of all, we determined the internal reliability of the items used to measure the content of teaching activity, namely the importance and satisfaction scores. Thus, we resorted to *Cronbach’s alpha reliability coefficient*, Item-total correlation and Cronbach’s alpha “if item deleted”. The value of the *Cronbach’s alpha coefficient* was 0.889, indicating a high internal reliability. We also have a high internal reliability of the model when analyzing the reliability of the items used to evaluate the level of satisfaction with the educational process, because the *Cronbach’s alpha value exceeds 0.850*. Therefore, all the conditions are met and we can proceed to the next step, namely data analysis and the interpretation of the results.

4. Research Results

In order to achieve the first objective, namely identifying the three key dimensions of the educational experience – student expectations, their satisfaction and the performance of the educational institution, we have identified the mean scores for the importance and the satisfaction with the content of teaching activities (Table no.1).

Table no. 1. MIS, MSS and MPS regarding the content of teaching activities

	MIS	MSS	MPS=MIS-MSS	t-Student
1.1. Valuable content of the courses	5.44	4.38	1.06	t=17.932
1.2. Interactiveness of the courses	5.31	4.27	1.04	t=15.778
1.3. Practical courses are based on case studies	5.30	4.23	1.07	t=16.715
1.4. Information is up to date	5.33	4.43	0.9	t=13.411
1.5. Specialists from companies are	5.24	3.74	1.5	t=21.087

	MIS	MSS	MPS=MIS-MSS	t-Student
<i>involved in teaching activity</i>				
<i>1.6. Students may choose the desired courses</i>	5.30	3.94	1.36	t=21.842
<i>1.7. The courses offer is adequate</i>	5.34	4.39	0.95	t=14.998
<i>1.8. Opportunity for internships</i>	5.40	4.17	1.23	t=14.144
The content of teaching activity	5.34	4.20	1.14	(****)

MIS= Mean Importance Score; MSS =Mean Satisfaction Score; MPS= Mean Performance Score

***** significant at $p < 0.001$. Source: authors' calculations*

Then, in order to identify the institution's performance, we analyzed the differences between the importance and the satisfaction with the analyzed factors, as in the presented methodology. The results show that we have high or very high importance for all the factors investigated. The most important aspects of the educational dimension of the content is "valuable content of the course", "opportunity for internships", "the courses offer is adequate", and "information is up to date". As we can see, students' first focus is on acquiring practical, relevant and complete knowledge in order to integrate easily into the labour market. Therefore, the opinions of the students can be successfully used as a predictor of the relevance of the economic education to the business environment (*H3*), because this aspect is their main concern through the instructional process. "The involvement of specialists from companies in teaching activity" is the factor with the lowest mean importance score. This is probably due to the high confidence that students have in the skills of university professors.

The highest values of the mean satisfaction scores regarding the content of education are encountered for "information is up to date" (the fourth most important factor), "the courses offer is adequate" (the third most important factor) and "valuable content of the courses" (the most important factor). Just in case of "the involvement of specialists from companies in teaching activity" (the least important factor) and "students may choose the desired courses" the mean satisfaction scores are lower than 4 ("mostly satisfied").

Analyzing the differences between the mean importance score (as an indicator of the expected value of the service) and the mean satisfaction score (as an indicator of the actual value provided), we obtained positive results for all factors considered in the case of the content of teaching activity. Therefore, at least at the moment, there is a negative performance of the educational institution in the case of content of teaching, meaning that the delivered services are lower than students' expectations. In order to determine the reliability of the results, the differences between MIS and MSS were tested using the Student t-test, which confirmed the existence of significant differences between the two dimensions considered (*H1*).

The worst performance is recorded for "the involvement of specialists from companies in teaching activity". Although it is the factor with the lowest importance it seems that the institution is far from reaching the level desired by the students. If we also take into consideration the performance of "opportunity for internships", we may conclude that the partnerships or the collaborations between academia and the private sector are not enough developed.

Instead, the smallest difference between what the students want and what the students get is for "the information received is up to date" and for "the courses offer is adequate". However, the result is very interesting, as students are willing to take a higher number of courses than they actually do. This means the economic institutions of higher education should increase the number of the subjects and the number of classes and not reduce them as in the last years.

Analyzing the relationships between the dimensions of the educational process (using the Spearman's correlation coefficient, for ordinal variables), we have noticed that an increase in the satisfaction of any factor (Table no. 2) implies an increase in the satisfaction level for all the

other factors (*H2 was confirmed*). The same influence is displayed on the entire instructional process. Thus, the satisfactions with “valuable content of the course” and with “information is up to date” are strongly linked to the satisfaction with “interactiveness of the courses” (the most intense correlation identified). Those students, who appreciate the participation of specialists from companies in the teaching activities, equally appreciate the opportunity to choose the desired courses. The assessment of the “valuable content of courses” also implies to take into consideration the amount of “up to date information”. We may conclude that the “interactiveness of the courses” is assessed through the others elements of the quality of teaching content (the most by the “valuable content of the courses” and the least by “opportunity for internships”). But for the entire instructional process it’s not as relevant as the “information up to date” and the “valuable content of the courses” which have a greater influence.

Table no. 2. The Correlations between the scores of students’ satisfaction with the Content of teaching activity

Rho	I.P.	1.1	1.2.	1.3.	1.4.	1.5.	1.6.	1.7.
1.1	0.376		(**)	(**)	(**)	(**)	(**)	(**)
1.2.	0.337	0.632		(**)	(**)	(**)	(**)	(**)
1.3.	0.349	0.498	0.537		(**)	(**)	(**)	(**)
1.4.	0.382	0.529	0.552	0.475		(**)	(**)	(**)
1.5.	0.275	0.380	0.519	0.360	0.465		(**)	(**)
1.6.	0.317	0.470	0.493	0.430	0.380	0.538		(**)
1.7.	0.269	0.491	0.443	0.316	0.421	0.250	0.326	
1.8.	0.203	0.269	0.334	0.305	0.320	0.356	0.388	0.318

I.P. = Instructional Process; *Rho* = Spearman’s correlation coefficient; **significant at $p < 0.001$.

Source: authors’ calculations

Next, we sought to determine which of the 8 factors used to assess the satisfaction with the content of teaching activities are the best predictors of satisfaction with the instructional process (O2.) through a multiple regression. First of all we converted the independent variables into standardized variables (z-scores) to avoid the multicollinearity problems. Only one significant predictor was identified: the valuable content of the course, the dimension which may be interpreted as the knowledge utility and relevance in the labour market (*H3*), ($Beta=0.250$). The value of F statistics obtained from the ANOVA table was 23.389 ($p < 0.001$). The coefficient of determination ($R^2=0.276$) (standard error of the estimate=1.148) suggests that about one third of the variance of the satisfaction with the instructional process is determined by the selected factor. Next we tried to identify to what extent we can predict the overall students’ satisfaction with education (Mean=4.27, SE=0.066) based on the satisfaction with the instructional process (Mean=4.33, SE=0.083) (O3.). The results of the linear regression allowed us to construct the following model: *Overall satisfaction with education* = 2.539 (0.335) + 0.417(0.017) * *Satisfaction with the instructional process*. Test value $F=29.928$ ($p=0.000$) from ANOVA table shows that the variation explained by the model is not due to chance, but to the factors considered. The coefficient of determination ($R^2=0.110$; Standard error of the estimate=1.229) indicates that 11% of the variance of students’ overall satisfaction with education is explained by the satisfaction with the instructional process, while the rest of the variance is due to other factors.

5. Conclusions

The objectives of this study were firstly oriented to determine the expectations and students satisfaction with the content of teaching activities as a key dimension of the relevance of higher education to the society and in particular to the business environment. The results revealed

students' concern to acquire practical knowledge, identified by their interest in "the valuable content of the courses", receiving "up to date information" and "opportunity for internships". Another result of this study shows that students may experience high levels of satisfaction both in the case of factors considered very important ("the valuable content of the courses") and in the case of factors considered less important ("practical courses are based on case studies"). The hypothesis of the existence of significant differences between students' expectations and students' satisfaction regarding the quality of the content of teaching activity had been verified. Unfortunately, in case of all factors the performance of institution was negative associated with a number of negative effects described above.

Factors that characterize the instructional process are correlated. Thus, the increase of satisfaction of any factor determines the increase of satisfaction for all other factors in both categories: the content of teaching activities and the quality of professors. Satisfaction with instructional process is most strongly related to satisfaction with the valuable content of the courses and the novelty of information, first one being the factor with the most significant contribution to the satisfaction with the instructional process (best predictor).

Latest findings of the study reveal a positive contribution of the satisfaction with instructional process to the overall satisfaction with education. Another conclusion we can draw is that the economic institutions of higher education should focus in case of recruiting and retaining strategies on different dimensions of the educational experience. Recruitment strategies must focus on the dimensions considered the most important in this case the valuable content of the course and the opportunity of internships. Retention strategies should be focused on ensuring student satisfaction and therefore be focused on improving the performance of the institution with the factors that contribute the most to their satisfaction with the instructional process.

Given the limits of research (the investigated population is not representative for the whole academic economic community) we believe that research objectives have been achieved by identifying some important factors to increase the relevance of higher education for business environment and society and some relationships that allow the improvement of the instructional process.

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INTERNAL ENVIRONMENT ANALYSIS TECHNIQUES (1)

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The situation analysis, as a separate component of the strategic planning, involves collecting and analysing relevant types of information on the components of the marketing environment and their evolution on the one hand and also on the organization's resources and capabilities on the other. The main purpose of the study of the analysis techniques of the internal environment is to provide insight on those aspects that are of strategic importance to the organization. The marketing environment consists of two distinct components, the internal environment that is made from specific variables within the organization and the external environment that is made from variables external to the organization. Although analysing the external environment is essential for corporate success, it is not enough unless it is backed by a detailed analysis of the internal environment of the organization. The internal environment includes all elements that are endogenous to the organization, which are influenced to a great extent and totally controlled by it. The study of the internal environment must answer all resource related questions, solve all resource management issues and represents the first step in drawing up the marketing strategy. The present paper accomplished a documentary study of the main techniques used for the analysis of the internal environment. The special literature emphasizes that the differences in performance from one organization to another is primarily dependant not on the differences between the fields of activity, but especially on the differences between the resources and capabilities and the ways these are capitalized on. The main methods of analysing the internal environment addressed in this paper are: the analysis of the organizational resources, the performance analysis, the value chain analysis and the functional analysis. Basically such an analysis of the internal environment allows the organization to identify its resources and capabilities as best as possible, in relation to the threats and opportunities brought about by the crisis situations. The research allows the identification of the organizational behaviour of resource and capabilities capitalization that must be adopted during the economic crisis. The study may be useful to both the academic and the business environment.

Keywords: marketing environment, internal environment, resource analysis, performance analysis, value chain analysis.

JEL classification: M31

I. Foreword

Any organization represents a component of the marketing environment where it is active. Starting from this statement, the implementation of the market strategy is regarded as a development of long term actions plans, aimed to ensure an efficient management of opportunities and threats within the marketing environment while considering the strengths and weaknesses of the organization in itself. The situation analysis, as a distinct component of the strategic groundwork (Figure 1), involves collecting and analysing the types of relevant

information on the marketing environment components and their evolution on the one hand, but also on the company's resources and capabilities on the other.

The marketing environment of the organization consists of two distinct levels, the internal environment that is made from specific variables within the organization and the external environment that is made from variables external to the organization. The external environment is divided further into two distinct categories (sub-environments of marketing): macro-environment and micro-environment. The potential result of the external environment analysis is identifying the organization's opportunities and threats, both present and future. On the other hand, the potential result of the internal environment analysis is identifying the strengths and weaknesses that are present in the organizational structure and culture.

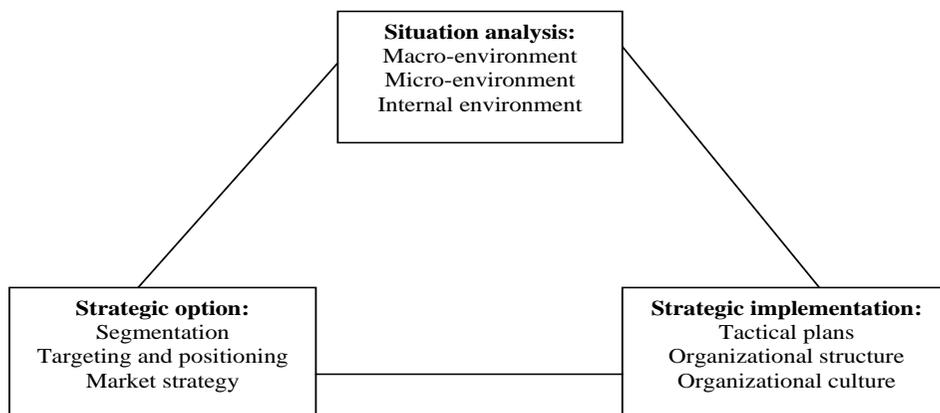


Figure 1. The strategic marketing management process

Source: Adapted from Pop, Nicolae, Alexandru. coord. *Marketing Strategic*, Bucharest: Editura Economică PH, 2000: p.45

II. Literature Review

The internal environment includes all elements that are endogenous to the organization, which are influenced to a great extent and totally controlled by it. The study of the internal environment must answer all resource related questions, solve all resource management issues and represents the first step in drawing up the marketing strategy. All these components are making up a “value chain”; the value chain analysis is based on the connection between the company's resources and its competitive position and it explores how these components contribute to the profitability (Porter 1985:121).

The external business environment comprises are set of factors that make up a complex, heterogeneous structure, consisting of a network of exogenous variables matched by the own resources of the company – endogenous variables. The marketing environment consists of two main components: the micro-environment and the macro-environment (Balaure 2003:75).

The micro-environment of the organization is comprised from those components that are in direct relationship with the company, of mutual inter-dependency, permanent and high intensity, issued from the need of achieving present or future objectives. These components are: merchandise suppliers, services providers, labour force providers, competitors, public organizations (Dumitru 2004:26).

The macro-environment includes all the factors that are influencing indirectly, on the long term and with weak intensity, generating business opportunities for the company or, alternatively, threatening and forcing the organization to adapt, with no possibility of a direct influence of these factors. The macro-environment components are: the demographic environment, the economic environment, the technologic environment, the cultural environment, the politics environment,

the legal and institutional environment, and the natural-geographic environment (Balaure 2003:78).

III. Methodology

The present paper accomplished a documentary study of the main techniques used for the analysis of the internal environment. Although analysing the external environment is essential for corporate success, it is not enough unless it is backed by a detailed analysis of the internal environment of the organization. The study of the internal environment must answer all resource related questions, solve all resource management issues and represents the first step in drawing up the marketing strategy. The special literature emphasizes that the differences in performance from one organization to another is primarily dependant not on the differences between the fields of activity, but especially on the differences between the resources and capabilities and the ways these are capitalized on.

IV. Internal environment analysis techniques

The analysis of the organizational resources is the most used instrument for the internal environment analysis. The following figure (Figure 2) presents the role that the resources of the organization hold as a starting point in the drawing up of the organizational marketing strategy. Also, one can note the way in which the organizational resources and capabilities may constitute the basis for developing the competitive advantage.

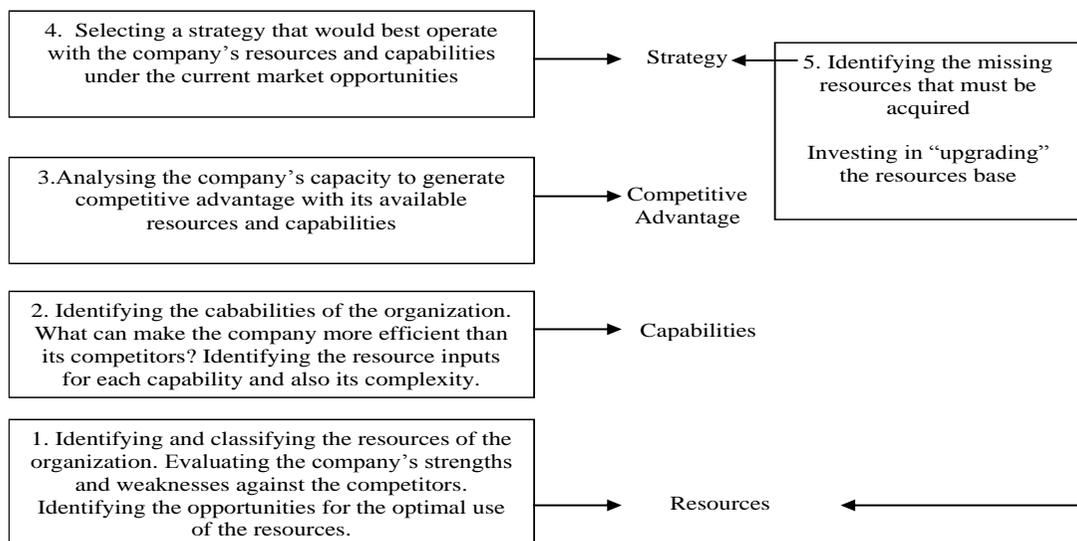


Figure 2. The use of the organizational resource analysis as an instrument for the internal environment analysis

Source: Adapted from Grant Robert Michael. *The resource based theory of competitive advantage: implications for strategy formulation*. California Management Review 3(1991):45-71;

The stages of this method are the following: defining the company resources that generate the organizational strengths and weaknesses; identifying the optimum method to combine the resources and generated capabilities; identifying the extent to which the combined resources and capabilities are generating sustainable competitive advantages; selecting strategies to best exploit the resources and capabilities of the organization in relation to the market opportunities; analysing the main characteristics of the resources and capabilities in terms of sustainability, transferability and repeatability as basic elements in sustaining competitive advantage and identifying the resource gaps. The research conducted on the method of analysing resources as a

method of internal environment analysis has proven that the development of sustainable competitive advantage depends directly on the company’s resources and capabilities. The analysis of resources is the basis for identifying those resources capable to sustain competitive market strategies. Through their nature, the strategies based on the organization resources are requiring a better understanding of the strategic capabilities of the organization. The marketing professionals may chose to combine the analysis of resources with one of the following methods.

Performance analysis. PIMS Programme (Profit Impact of Market Strategy) is the most known method of performance analysis and was developed by the American Institute of Strategic Planning to emphasize the influence of the internal strategic factors on the activity of the organization. The main aim of the PIMS method is to empirically develop principles to determine which strategic variables and under which circumstances are producing one result or another, identified as the sales volume or investment profitability. The conclusion following the research was that nine strategic variables are influencing 80% out of the variations in the organizational profit. It must be also considered that there are many other ways to evaluate the organizational performance. Indeed, although most of them suppose financial assessment, there is also a series of non-financial indexes that may offer a long term image on the “health” of the business. Part of these indexes may be the market position, the value of products, managerial development or work productivity. We must also bear in mind that the strategic objectives of the organization may change over time and the financial indicators measuring the business performance must also be modified. For example, when a new product is launched, the key index may be the sales growth rate, while when the product is at its maturity, one may use the return on initial investment or the profitability rate. Considering the importance of both the financial and non-financial indicators Kaplan and Norton (Kaplan and Norton 1992:71-79) have developed the balanced scorecard as a method of evaluating and measuring the company performance. This approach suggests four perspectives to integrate the financial and non-financial performance indicators of the organization: *internal perspective, financial perspective, learning and growth perspective and the customer perspective*. Identifying the strategic factors with the greatest impact (positive or negative) is also important to be performed by the strategic managers seeking to increase the company’s performance. Otherwise put, the managers should identify those variables that have significant effect on the company’s strengths and weaknesses. A variable may be considered as a strength if it generates competitive advantage, if it brings extra value to the consumer and if the organization is able to capitalize it at a superior level than the competitors on the market. On the other hand, a variable is a weakness for the organization if it is also of value to the consumer but if the company is unable to generate it, or produces it at an inferior level than the competition.

Value chain analysis. This model (Figure 3) was formulated by Porter as a method of examining the nature and development of existing synergies between the internal activities of an organization.

SUPPORT ACTIVITIES	ORGANIZATION INFRASTRUCTURE					PROFIT MARGIN
	<i>HUMAN RESOURCE MANAGEMENT</i>					
	<i>TECHNOLOGICAL DEVELOPMENT</i>					
	<i>PROCUREMENT</i>					
	<i>INBOUND LOGISTICS</i>	<i>OPERATIONS</i>	<i>OUTBOUND LOGISTICS</i>	<i>MARKETING & SALES</i>	<i>SERVICE</i>	

Figure 3. The value chain model

Source: Adapted from Porter Michael. *How competitive forces shape strategy*, Harvard Business Review, 2(1979):137-145;

According to Porter, any company is a succession of activities undertaken to develop, produce, promote and deliver its products. These activities may be grouped and represented into five primary activities and four support activities using the value chain concept. The basic principle of the value chain is that it represents a systematic method of examining all activities taking place within the company and the method in which these interact to differentiate the organization's value chain from those of its key competitors. This differentiation is recognised as a key source for competitive advantage. One of the key advantages of this model is recognising the fact that an organization is more than a random collection of production machines, financial and human resources, as all of these resources are not valuable unless they are emphasized by activities and organization within a system that ensures that the products and services delivered are offering value-added to the customer/consumer.

We must also consider that the offer of most of the organizations is made up from many types of products and services, meaning *several value chains*. Thus, an analysis of the internal environment supposed analysing these value chains. The internal analysis of an organization may be conducted through the following steps: examining the value chain of each product line, considering the activities involved in manufacturing those products; examining the connection between the value chains of each line of products; examining the potential synergies between the value chains of different product lines. In addition to the above presented issues, one must also consider that a great extent of the value added created through the organization's goods and services also depends on the supply chain. For example, the quality of a car is not only influenced by the activities inside the organization but also by the spare parts, components or dealership performance.

One of the simplest methods of analysing the internal environment is the *functional analysis*. The abilities and resources of an organization may be classified under a capability profile starting from the basic business functions of the company: marketing, finance, research and development, production, etc. (Table 1).

Table 1.-The profile of the organization's strategic capabilities

Internal area	Resource/competence	Evaluation
<i>The profile of the strategic capabilities based on resource analysis</i>		
Material resource	New production facilities that incorporate the latest technology	High intensity strength (+4)
Human resource	Highly specialized staff	Low intensity strength (+2)
Financial resource	High liquidity	Low intensity weakness (-2)
<i>The profile of the strategic capabilities based on value chain analysis</i>		
Intangible assets	Solid corporate image on the market Known brands	High intensity strength (+4)
Inbound logistics	Excessive use of a low number of suppliers	High intensity weakness (-4)
Outbound logistics	Inefficient management of external warehouses	Medium intensity weakness (-3)
Human resource management	High absenteeism	High intensity weakness (-4)

Source: Adapted from West, Douglas, Ford, John and Ibrahim, Essam. *Strategic Marketing, Creating Competitive Advantage*, Oxford: Oxford University Press, 2006, p. 87

The resources of an organization do not include only financial and natural resources, but also human factor abilities to implement the necessary objectives, strategies and policies for each area of activity. When used properly, these functional resources are strengths base on which future strategies may be developed. The organizational culture and structure must also be regarded as key elements of the internal environment of the organization, in addition to being functional resources.

V. Conclusions

Regardless of the analysis method used and of the variable researched, the analysis of the internal environment of the organization may be accomplished through the development of a “strategic capabilities profile” that must identify, measure, and weigh the strengths and weaknesses of the organization. Basically such an analysis of the internal environment allows the organization to identify its resources and capabilities as best as possible, in relation to the threats and opportunities brought about by the crisis situations.

VI. Note

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SOCIAL RESPONSIBILITY VALUES: A CROSS COUNTRY COMPARISON

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This empirical study aims at finding out how similar and/or different are the future Romanian and Slovenian managers in assessing the importance of organization's social responsibility values. The assumption of the research is that most of most of students in engineering and business will hold middle management position in the near future. The sample consists of 727 undergraduate and graduate students' levels from Romania and Slovenia, two former socialist countries. The data has been collected between 2008 and 2009 in the framework of GLOBE student project⁹⁵, using a section of GLOBE III questionnaire, about the importance of CSR related values in critical decisions. The findings concern the similarities and significant differences between: 1) whole Romanian and Slovenian samples; 2) Romanian and Slovenian students in engineering; 3) Romanian and Slovenian students in business. Our findings revealed a trend toward convergence in the importance given to decision's effect on contribution to the economic welfare of the nation and local community, as well as on employees' professional growth and development and on environment. The biggest difference between the groups concerns the decisions' effect on firm profitability (the Romanians considering this value as more important in critical decisions than the Slovenians). The students in engineering proved to be a more homogeneous group, showing convergence in assessing the importance of eight out of fifteen social responsibility values. The biggest difference concerns the decisions' effect on firm profitability (Romanians consider it as having higher importance in critical decisions than the Slovenians). Comparison of students in business revealed convergence in assessing the importance of employees' professional growth and development and decision's effect on environment. The biggest positive difference concerns the same value of decisions' effect on firm profitability. The Romanians are well behind Slovenians in realizing the importance of decisions' effect on relationships with important partners of the organization, ethical considerations and decision's effect on long term competitive ability of the organization.

Keywords: Social responsibility, Romania, Slovenia, students

JEL: M14

1. Introduction

The research question the present study tries to answer concerns the convergence and divergence in Romanian and Slovenian students' opinion about the *organization's social responsibility values*.

The importance of the issue is emphasized by the actions taken by international and global decisional institutions, aiming at strengthening a more humane, ethical and more transparent business behavior. Among these actions, a critical importance has the *ISO 26000* which provides guidance to the organizations on how to understand, integrate and communicate the social responsibility, in order to improve its credibility and social image. It deals with definitions,

⁹⁵ The project is co-ordinated by R. Lang from Chemnitz University of Technology. The data for Slovenia has been collected by D. Pucko and T. Cater (University of Ljubljana)

principles, core subjects of social responsibility and guidelines on integrating the social responsibility in the organization's management and behavior (Discovering ISO 26000). Our attempt offers a general view on the future managers understanding on how an organization should behave/decide while being socially responsible (*doing good for doing well*).

2. Literature review

When approaching the organizations duties and accountability for their global environment constituents, the researchers use a wide spectrum of *concepts* (corporate social responsibility, corporate social accountability, corporate societal responsibility, corporate citizenship, corporate sustainability, sustainable entrepreneurship, social performance, triple bottom line, business ethics etc.) and *theories* (shareholder, stakeholder, societal, philanthropic etc. theories). While at the beginning of the 7th decade, *Friedman* (1970) argued that the only one social responsibility of business is to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, other researchers contributed to defining the *new paradigm* of doing business (tuned with today's society expectations). For instance, *Carroll* (1999) asserts that corporate social responsibility involves the conduct of a business so that it is economically profitable, law abiding, ethical and socially supportive. *Moir*, a partizan of stakeholder theory, defines business social responsibility as its commitment towards ethical behavior, economic development and improvement in the quality of life of its workforce, their families, the local community and the society at large (*Moir* 2001). *Kotler & Lee* (2005) argue that "corporate social responsibility is a commitment to improve community well-being through discretionary business practices and contributions of corporate resources" (*Kotler, Lee, 2005, p.3*). They provide a matrix of six options for social responsible activities of a company: cause promotions; cause related marketing; corporate social marketing; corporate philanthropy; community volunteering and socially responsible business practices (*Ibid.*, p.23-24). There is also a recent view on the need to reframe corporate social responsibility (CRS) into corporate social responsibilities (CSRs), positioning "against the common academic practice of aggregating CSR behaviors into some overall umbrella construct such as CSR, corporate social performance (CSP), or business citizenship" (*Godfrey et al, p. 317*).

Obviously, there is no one definition of what *it takes* to be a responsible organization (corporation). The key is to have a rigorous process for *identifying* those responsibilities and fulfilling them (*Blyth* 2005, p. 30). This is why, in our approach we do not aim to build a special *construct* ("umbrella") of organizational social responsibilities, or to empirically discover the socially responsible *practices* of the organizations, but rather focus on the *importance* should be given to social *responsibility values* in managerial decision making.

3. Methodology

The students' involvement in the research is based upon the assumption that most of them will hold middle management position in the near future. The sample consists of 727 subjects, structured based upon: *field and level of study* (43.47% business/economics; 56.53 % engineering; 68.2 % Bachelor; 31.8 % Master); *gender* (49% female, 51% male), *age groups* (% 18-22 years; % 23-27 years; % ≥ 28 years), *interest in management career* (59.6% yes), and *interest in founding a business venture* (65.2%% yes). The Romanian sample consists of 427 students (52.7% male, 47.3% female), while the Slovenian sample has 300 subjects (60.3% male, 39.7% female). The surveys were carried out in either 2008 or the first half of 2009.

The data has been collected using a part of GLOBE III questionnaire (about CSR). The subjects were asked to show the *importance* each item should have in making critical decisions, using a seven points scale (1 = no importance; 2 = of minor importance; 3 = some importance, but

limited; 4= moderate importance/the item should be frequently considered as important; 5 = high importance/almost always the item should be considered important; 6= very high importance/the item should always be considered important; 7 = the highest importance/the item should be considered the most important one). Data processing has been performed in SPSS 17. The scale reliability shows a *Cronbach Alpha* coefficient of .827 if two items are deleted from the original 17 scale items (Pleasing, respecting, not offending a Devine being and, respectively, Effects on supernatural forces such as auspicious days, forecast by truth sayers). In testing the *statistical significance* of the differences between the different groups, the *independent samples test* was employed, using the *0.05 significance threshold* (equal variances assumed for *Levene's test*).

4. Findings

Table 1 displays the rank of social responsibility values in critical decisions in students' opinion. Similar rankings are seen for *customer satisfaction* (first place in both samples) and employees' professional growth and development (fifth place). The decision's effect on local community and national welfare, as well as on minority and female employees are considered to be least important in both samples. An important difference concerns the second important social responsibility value: while the Romanians consider it should be the decision's effect on profitability and product quality, the Slovenians see the organization's long term competitive ability as the second important in critical decisions.

Table 1 Importance of social responsibility values

ROMANIA			SLOVENIA		
<i>SR dimension</i>	<i>Mean</i>	<i>Rank</i>	<i>SR dimension</i>	<i>Mean</i>	<i>Rank</i>
Customer satisfaction	6.18	1	Customer satisfaction	5.55	1
Effect on firm profitability;	5.76	2	Effect on the long-term	5.52	2
Effect on product quality	5.76	2	competitive ability of the		
			organization		
Effect on sales volume	5.59	3	Effect on product quality	5.47	3
Employee rel. issues (employee	5.58	4	Effect on rel. with other org. with	5.39	4
well-being, safety, working			which you do serious business		
conditions)			(suppliers, government		
			agencies, partners in strategic		
			alliances)		
Employee professional growth	5.41	5	Employee professional growth	5.28	5
and development			and development		
Effects on the environment	5.37	6	Employee rel. issues (employee	5.26	6
			well-being, safety, working		
			conditions)		
Cost control	5.15	7	Effects on the environment	5.21	7
Effect on the long-term	5.10	8	Ethnical considerations	5.18	8
competitive ability of the					
organization					
Effect on rel. with other org. with	5.05	9	Effect on firm profitability	4.89	9
which you do serious business					
(suppliers, government agencies,					
partners in strategic alliances)					
Ethnical considerations	4.88	10	Effect on sales volume	4.85	10
Welfare of the local community	4.86	11	Cost control	4.82	11
Contribution to the economic	4.69	12	Welfare of the local community	4.69	12
welfare of the nation					
Effect on minority employees;	4.40	13	Contribution to the economic	4.57	13
Effect on female employees	4.40	13	welfare of the nation		
			Effect on female employees	4.00	14
			Effect on minority employees	3.82	15

Table 2 depicts the significant differences in the mean scores given by the two groups ($p \leq .005$). *T*-test failed to reveal significant reliable differences between the two samples for the following social responsibility values: decision's effect on contribution to the economic welfare of the nation (sig 2-tailed = .243) and local community (sig 2-tailed = .105), as well as on employees' professional growth and development (sig 2-tailed = .152) and on environment (sig 2-tailed = .144). Thus, it could be assumed there is a trend toward convergence in the importance given to these social responsibility values. The biggest difference ($t = 9.117$) concerns the decisions' effect on firm profitability, the Romanians considering this value should be more important in critical decisions than the Slovenians (Romanians mean score = 5.76, Slovenians mean score = 4.89). The negative gaps are recorded for decision's effect on relationships with other organizations with which the company has serious business (-4.674), on long term competitive ability of the organization (- 4.672) and the ethical considerations (- 2.907; equal variances assumed). These gaps show that the Romanians give lower scores for the mentioned social responsibility values than the Slovenians.

Table 2 Importance of organizational social responsibility values: testing the significant differences between Romanian and Slovenian students

<i>Social responsibility values</i>	Mean diff	<i>t</i>	Sig(2-tailed)
Cost control	.33	3.631	.000
Customer satisfaction	.63	7.269	.000
Employee rel. issues (employee well-being, safety, working conditions)	.32	3.428	.001
Contribution to the economic welfare of the nation	.12	1.169	.243
Welfare of the local community	.17	1.624	.105
Employee professional growth and development	.13	1.435	.152
Effects on the environment	.16	1.462	.144
Ethnical considerations	-.30	-2.868*	.004
Effect on the long-term competitive ability of the organization	-.42	-4.672	.000
Effect on rel. with other org. with which you do serious business (suppliers, gov. ag., partners in strategic alliances)	-.34	-4.674	.000
Effect on firm profitability	.87	9.117	.000
Effect on minority employees	.58	4.564	.000
Effect on female employees	.40	3.112	.002
Effect on product quality	.29	3.175	.002
Effect on sales volume	.74	7.638	.000

95%confidence interval; Levene's test for equality of variances; * equal variances assumed

Table 3 displays the significant differences between *students in engineering* (Romanian sample: 261; Slovenian sample: 150).

Table 3 Importance of organizational social responsibility values: testing the significant differences between students in engineering

<i>Social responsibility values</i>	Mean differ.	<i>t</i>	Sig (2-tailed)
Cost control	.16	1.414*	.158
Customer satisfaction	.60	5.230	.000

<i>Social responsibility values</i>	Mean differ.	<i>t</i>	Sig (2-tailed)
Employees relations issues	.27	2.243	.026
Contribution to the economic welfare of the nation	-.06	-.377	.707
The welfare of the local community	0	.010	.992
Employee professional growth and development	.16	1.223	.223
Effects on the environment	.18	1.173	.242
Ethical considerations	-.17	-1.217*	.224
Effect on the long term competitive ability of the organization	-.50	-4.178	.000
Effect on relationships with other organizations with which you do serious business	-.16	-1.575*	.116
Effect on firm profitability	.80	6.362	.000
Effect on of minority employees	.43	2.441	.015
Effect on female employees	.26	1.426	.155
Effects on product quality	.28	2.316	.021
Effects on sales volume	.58	4.559	.000

95%confidence interval; Levene's test for equality of variances; * equal variance assumed

As seen, *t*-test failed to reveal significant reliable differences between the two samples for the following social responsibility values: cost control (sig 2-tailed = .158), contribution to the welfare of the nation (sig 2-tailed = .707) and local community (sig 2-tailed = .992), employees professional growth and development (sig 2-tailed = .223), decision's effect on environment (sig 2-tailed = .242), ethical considerations (sig 2-tailed = .224), decision effect on relationships with other organizations (sig 2-tailed = .116) and on female employees (sig 2-tailed = .155). The biggest positive difference ($t = 6.362$) concerns the decisions' effect on firm profitability, the Romanian students this value should be more important in critical decisions than the Slovenians (Romanians mean score = 5.82, Slovenian students mean score = 5.02). The only one negative gap (-4.178) concerns the decisions' effect on long time competitive ability of the organization, with the Slovenian group of engineering students considering this value as being more important than the Romanian group (Slovenian mean score = 5.59; Romanian mean score = 5.09).

Table 4 shows the significant differences between Romanian and Slovenian students attending *business studies* (Romanian sample: 166 Slovenian sample: 150).

Table 4 Importance of organizational social responsibility values: testing the significant differences between students in business

<i>Social responsibility values</i>	Mean differ.	<i>t</i>	Sig. (2-tailed)
Cost control	.49	3.621	.000
Customer satisfaction	.66	4.921	.000
Employees relations issues	.39	2.836	.005
Contribution to the economic welfare of the nation	.39	2.651	.008
The welfare of the local community	.39	2.632	.009
Employee professional growth and development	.12	.892	.373

<i>Social responsibility values</i>	Mean differ.	<i>t</i>	Sig. (2-tailed)
Effects on the environment	.13	.893	.373
Ethical considerations	-.40	-2.671	.008
Effect on the long term competitive ability of the organization	-.32	-2.401	.017
Effect on relationships with other organizations with which you do serious business	-.49	-4.892*	.000
Effect on firm profitability	.91	6.288	.000
Effect on of minority employees	.84	4.632	.000
Effect on female employees	.65	3.528	.001
Effects on product quality	.27	2.018	.045
Effects on sales volume	.84	5.907	.000

95% confidence interval; Levene's test for equality of variances; * equal variances assumed

T-test failed to reveal significant reliable differences between the two samples for the following social responsibility values: employees' professional growth and development (sig 2-tailed = .373) and decision's effect on environment (sig 2-tailed = .373). The biggest positive difference ($t = 6.288$) concerns the decisions' effect on firm profitability, Romanians considering this value should be more important in critical decisions than the Slovenians (Romanians mean score = 5.66, Slovenians mean score = 4.75). The smallest positive gap (favoring the Romanian group) is recorded for decisions' effect on product quality (2018), with 5.70 mean score for Romanians and 5.43 for Slovenians business students' group. Negative gaps are recorded for the following dimensions: decisions' effect on relationships with important partners of the organization (-4.887- the highest gap), ethical considerations (-2.671) and decision's effect on long term competitive ability of the organization (-2.401). For these dimensions, the Slovenian business students gave higher importance than their Romanian counterpart (Slovenians mean scores for mentioned dimensions = 5.61; 5.35 and, respectively, 5.44; the Romanians mean score = 5.12; 4.95 and 5.12 respectively).

5. Conclusions

Our findings show that the new generation of managers share the (average) opinion that decision's effect on *customer satisfaction* comes first, while on local and national welfare, on female and minority employees the least. These might be taken as signs of convergence in the future managers' attitude in decisional process. The most significant differences between Romanians and Slovenians (at all levels of comparison) is recorded for decision's effect on *profitability*, long term competitive ability of the organization and on serious business partners. Romanians tend to be interested more in money related issues and short term effects of their decisions, while Slovenians have a more strategic vision. Perhaps these significant differences have *cultural* explanations (for instance, future orientation, in group collectivism, institutional collectivism, human orientation, gender equality etc.), thus, it seems rational to direct our future research towards such topics.

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THE ROLE OF THE SALES TECHNIQUES IN THE MARKETING ACTIVITY OF THE COMPANIES IN BUCHAREST

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In a time of economic crisis there can be easily observed the difficulty in finding managerial viable solutions to support the business at least at a level considered satisfactory in terms of economic performance. The managers will try to adopt marketing strategies able to drive to the preservation of the competitive position held in the reference market and to achieve goals. But this cannot be achieved without a pertinent analysis of the situation of both enterprise and business environment. It is also necessary to assess the marketing skills at its disposal, those specific capabilities needed to conduct a profitable operation. All the marketing department's efforts will be directed to implement sales techniques capable of giving to the promoted products specific advantages and thus to achieve the marketing goals proposed.

In the present study will be presented just a few issues considered important for creating a view about the behavior of the enterprises in the adoption of sales promotion techniques. The analysis of the information continued in the direction of understanding, by managers and marketing executives, the necessity of the implementation of some coherent communication approaches centered on sale promoting techniques. The analysis of the results obtained after the initiation of communication processes, which is based on sales promotion techniques, represents a significant component of the marketing audit initiated by the enterprises.

The strategic market orientation of the studied companies could be analysed also through some existing correlations between the position held in the reference market and the frequency of the use of the sales promotion techniques as well as between the level of competition and the frequency of the use of these techniques. Attracting and retaining customers over a long period of time, differentiation from competitive products are just some of the main objectives pursued by these companies. . Regardless of the place occupied in the reference market, it is absolutely necessary to implement specific types of promotional techniques to achieve the mentioned objectives.

Keywords: sales techniques, competitive position, competitiveness, marketing

JEL classification M: Business Administration and Business Economics; Marketing; Accounting

From this perspective, the importance of decisions made in the marketing department can be critical to the business concerned, which will seek the best solutions to overcome the crisis. As a result, there frequently arises a series of questions that can be structured as follows:

- Will the adoption and implementation of some techniques of promoting the sales in a time of economic crisis succeed to differentiate the offer of the company from that of other competitors in the same market segment?
- Which would be the most efficient sales promotion techniques, capable of fulfilling the communicational objectives arisen by the marketing ones?

- How much would the budget be for sales promotion techniques in case of an obvious economic crisis?

For all these questions were sought and found answers through quantitative marketing research initiated in the year 2010, among the 70 companies with headquarters in Bucharest. The collection, data analysis and interpretation were conducted during March-June of that year, based on a predetermined questionnaire with 19 questions. The observation unit was the company in Bucharest and the research unit was the marketing director or the person responsible for marketing activities within the enterprise.

In the sample there were comprised the following business areas: services (including telecommunications, insurance, marketing and advertising), with the highest share (51.42), trade with a share of 37.14%, production and distribution of industrial equipments, having a weight of 11.42% out of the total sample.

The limitations of this quantitative marketing research took into account the sample's representativeness, but if it is assumed that the analysed companies from Bucharest are in the top of the best Romanian enterprises in what marketing implementation concerns, then these results can be analysed qualitatively and in relation to the national situation.

In the present study will be presented just a few issues considered important for creating a view about the behavior of the enterprises in the adoption of sales promotion techniques as pertinent solution to support a competitive position in the market even in times of economic crisis.

What was considered to be relevant was the information resulted from the research on identifying the existing competitive level in a given field of activity and the position held by the enterprise in the reference market. Thus, 67.14% of the respondents indicated the existence of more than 20 competitors in the same market segment, while the positions held by national enterprises are concentrated in a proportion of 47.14% below the 11th place.

It is noteworthy the fact that 71.43% of the interviewed persons from the managerial level believed that in their field there exists a very strong competition, while 25.71% think that competition is rather strong. Only 1.43% of the respondents indicated a lack of competition. This information reflects the level of appraisal regarding the existing competition and it may indicate a trend towards knowing the competition thus embracing competitive strategies that will lead at least to the preservation of the competitive position held by that time.

The analysis of the information continued in the direction of understanding, by managers and marketing executives, the necessity of the implementation of some coherent communication approaches centered on sale promoting techniques showed a rate of 92.86% of the respondents who had adopted such techniques, while only 7.14% indicated the absence of such techniques from the communicational steps previously initiated. The importance of sales promotion techniques adoption was supported by a significant percentage of the respondents and namely: 61.43% considered it as being very important, 32.86% important and only 5.71% did give no relevant importance to the application of the sales promotion techniques.

The sales promotion techniques (table nr. 1) have been adopted to achieve clear communicational objectives, such as:

Table 1. The objectives of sales promotion techniques

Communicational objectives	Frequency of the responses - absolute-	Frequency of the responses - relative-
The increase in the sales volume for the promoted service or product	55	78,57%
The stimulation of the demand for the promoted	42	60%

Communicational objectives	Frequency of the responses - absolute-	Frequency of the responses - relative-
service or product		
Consumers loyalty	49	70%
Countering the actions of the competitors	17	24,29%
Influencing the consumers' behaviour	19	27,14%
Strengthening the company's image among the target audience	45	64,29%

From the point of view of the categories of the sales promotion techniques which were most frequently adopted by the enterprises, there were the following answers registered:

Table 2. The sales promotion techniques which were most frequently used by the enterprises from Bucharest

Sales promotion techniques	Frequency of the responses - absolute-	Frequency of the responses - relative-
Special offer	50	71,43%
Free offer	19	27,14%
Launching price	29	41,43%
Bundle sales	22	31,43%
Discount voucher	15	21,43%
Sample offering	14	20%
Tasting	8	11,43%
Demonstrations	20	28,57%
Promotional gifts	31	44,29%
Promotional contests	23	32,86%
Merchandising	15	21,43%
The advertising at the point of sale	27	38,57%

There can be noticed (table nr. 2) the preponderant focus on: special offers, promotional gifts, launching price in case of new products, the advert at the point of sale etc.

The analysis of the results obtained after the initiation of communication processes, which is based on sales promotion techniques, represents a significant component of the marketing audit initiated by the enterprises.

A conclusion of these internal researches was in accordance with the satisfaction of the clients in regard with The adoption of the sales promotion techniques. Approximately 92% of the enterprises have graded a high percent of satisfaction among their own clients in regard with the variety of promotional techniques adopted.

This positive result could be considered a positive signal in the direction of the coherent implementation of these type of techniques with the goal of maintaining the competitive position of the organizations.

Table nr. 3: Categories of sales promotion techniques that will be adopted next year

Sales promotion techniques	The frequency of the responses - absolute -	The frequency of the responses - relative -
Price reductions	44	62,86%
Presents and promotional premiums	3	45,71%
Contests and promotional games	20	28,57%
Free testing of the products	16	22,86%
Merchandising	15	21,43%
Advertising at the place of sale	26	37,14%

There can be noticed from the table, (table nr. 3) the orientation of the clients towards price reductions and promotional presents, techniques that drive customer interest towards the promoted products due to the easily perceived benefits. In addition, it was observed the fact that 74.29% of the enterprises of the study understood the necessity of increasing the budget of sales promotion techniques, while the other 25.71% preferred to maintain the same budget for the next year. What is also remarkable is the fact that none of the companies would consider reducing the budget even taking into account the negative economic situation.

Unfortunately, from a marketing theory standpoint, the specialists of these enterprises do not succeed to match correctly the sales promotion techniques with the implemented strategy. Therefore, 61.43% of the respondents consider that the sales promotion techniques have a direct connection with the marketing strategy of the organization and only 11.43% of the companies establish a direct relation of subordination towards a communication strategy. The enterprises which could not indicate any correlation between the techniques and the strategy were in proportion of only 11.43%.

The strategic market orientation of the studied companies could be analysed also through some existing correlations between the position held in the reference market and the frequency, (table nr. 4) of the use of the sales promotion techniques as well as between the level of competition and the frequency of the use of these techniques.

Table nr.4 The frequency of the use of the sales promotion techniques in accordance with the position held at the national level

Position held at the national level	The frequency of the use of the sales promotion techniques					Total	
	Frequently		Occasionally		Rarely		
	Absolute	Relative	Absolute	Relative	Absolut	Absolute	Relative
First position	11	15,72 %	5	7,15%	0	16	22,87%
Positions 2-3	14	20%	7	10%	0	21	30%
Positions 4-10	10	14,28%	4	5,71%	0	14	19,99%
< Position 11	15	21,43%	4	5,71%	0	19	27,14%
Total	50	71,43%	20	28,57%	0	70	100%

It is noted that in the case of the enterprises located in a lower position than the number 11 in the reference market, managers have indicated in proportion of 21.43% the frequent use of merchandising techniques, showing their concern for their existing competence in their field activity and for the adoption of techniques aimed to differentiate their product from other

competing products. Moreover, the values obtained were placed relatively close to the situation of the places 2-3 and those ranked lower than 11, followed by those located in the first place, and that of places 4-10. No respondent indicated the rare use of sales promotion techniques.

Also, the influence of competition, (table nr. 5), present in marketing activities focused on the adoption of sales promotion techniques. In other words, the companies studied have the ability to identify the existing level of competition in their field and to find solutions to move towards promotion techniques that lead to achieving a competitive position.

Table 5: The influence of level of the competition on the frequency of use of sales promotion techniques

The level of the competition	The frequency of the use of sales promotion techniques					Total	
	Frequently		Occasionally		Rarely		
Very strong	37	52,86 %	13	18,57%	0	50	71,43%
Rather strong	12	17,14%	6	8,59%	0	18	25,73%
Rather weak	0	0	1	1,42%	0	1	1,42 %
Weak	0	0	0	0	0	0	
Inexistent	1	1,42%	0	0	0	1	1,42%
Total	50	71,42%	20	28,58%	0	70	100%

A very strong competition causes the adoption of common merchandising techniques aimed at increasing the sales volume of the products promoted. It could be noticed that 70% of the businesses that operate in an area marked by very strong competition and rather strong one understand the need and role of sales promotion techniques in the marketing strategy.

Attracting and retaining customers over a long period of time, differentiation from competitive products are just some of the main objectives pursued by these companies. Regardless of the place occupied in the reference market, it is absolutely necessary to implement specific types of promotional techniques to achieve the mentioned objectives. Thus, discounts, promotional gifts, advertising at point of sale, etc.. are techniques that can respond quickly to these requirements. An appropriate budget allocation for the effective application of these techniques shows the management maturity of the enterprises with marketing vision. Rapid exit from an unfavorable economic crisis requires decision making and communication planning, targeted to support sales promotion techniques.

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THE PREMISES OF STRATEGIC MARKETING PLANNING IMPLEMENTATION WITHIN SMALL AND MEDIUM SIZED ENTERPRISES

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The main purpose of the present paper is to identify the framework and the necessary conditions for the small and medium sized enterprises (SMEs) to be able to adopt the strategic marketing planning. Also, the paper aims to underline the importance of the strategic marketing planning and the manner in which the SMEs can adopt, implement and operationalize the strategic marketing planning instruments, whose correct understanding and usage ensure the capacity to generate competitive advantage, the key element both from the perspective of the fierce competition and the perspective of the future development of the SMEs. Within SMEs the implementation of marketing becomes an evident requirement, mostly due to the relationship that these have with the market, thus, leading towards market orientation of the activities, a new approach developed by the marketing vision on managing the activities from these types of organizations. Regarded upon, from the marketing perspective, the activities from the SMEs, especially the marketing activities, cannot take place randomly. Resource allocation, a characteristic of these types of organizations, and the objectives with regards to superior customer needs satisfaction and economic efficiency maximization, claim thorough planning and deployment of the activities in a sequence that represents the implementation of a strategy previously assumed. Within this framework, the strategic marketing planning appears as a complex process employing all scientific instruments that comprise segmentation, positioning and marketing mix. Utilizing the strategic marketing planning within SMEs depends to further extend on marketing integration; process directly related with a series of factors such as the nature of the market, development stage, product type, management quality and the influences of the marketing department of the SME. The implications onto the marketing activities from SMEs are reflected upon each strategic marketing planning instrument, where we can find, under correct understanding and application, objectives and market and penetration strategies as product, price, distribution and promotion strategies.

Keywords: marketing, SMEs, segmentation, positioning, marketing mix.

JEL Classification: M31

Introduction

Small and medium sized enterprises (SMEs), the main factor of development of the present economy, represent, for the modern marketing, a challenge that needs to be addressed by adapting all scientific instruments to the features of these types of organizations. The methods, techniques and marketing instruments dynamically connect the SMEs to the *market*, characterized within the last decades by multiple changes, evolutions that have as premises within marketing development the social-economical dynamism (Florescu 1992: 12). The development of SMEs depends more and more on their capacity to place the general, strategic and tactic planning (Olteanu 2007: 45) in the center of the activities, position that can ensure the fulfilment of both

marketing and general objectives of these types of organizations. The SMEs have a special role in the present economy. They represent a permanent source of innovation, creation of new working places, which in turn create the framework for the development of entrepreneurship abilities. The marketing activities must take into consideration all these elements as being the main features of SMEs, both from the perspective of market relations that can be found in the marketing environment and from the perspective of planning the marketing activities.

As a requisite in the strategic marketing planning the features of the SMEs must be taken into consideration and valorized to an extent that permits the economic efficiency maximization.

The importance of strategic marketing planning within SMEs

Strategic marketing planning, like many of the marketing concepts with which we operate today, have undergone numerous changes, thus leading to an enrichment of its content due to the social and economic evolutions. All the changes led to the repositioning of marketing within SMEs and to the changement in status of the marketing activities, which became marketing function (Olteanu 2007: 113). The marketing function ensures within SMEs (Walsh and Lipinski 2009: 569) the success through the determination and satisfaction of target clients' needs, wants and aspirations, in utilizing the scientific marketing instruments, and represents the base for the accomplishment of the marketing objectives.

Taking all these elements into consideration it is only natural for the strategic marketing planning to be part of a more complex process having as base component strategic planning, that defines the place of marketing activities within the structure and different strategic level of the organization (Pop and Dumitru 2001: 203). In understanding the marketing role within SMEs the managers must also take into consideration the strategic planning.

Strategic marketing planning must be regarded as a complex process, whose dimension appears within the vertical succession as having as components strategic planning oriented towards the market, strategic planning of the activities and strategic marketing planning (Olteanu 2007: 155). Within the process of strategic marketing planning it is necessary that the segmentation, positioning, marketing mix elaboration and the methods and techniques used to be properly adapted to the specific limitations of the SMEs.

From the large variety of limitations of the SMEs in connection with the marketing characteristics can be mentioned (Gilmore, Carson and Grant 2001: 6):

- limited resources – such as finance, time, marketing knowledge;
- lack of specialist expertise – owners-manager tend to be generalists rather than specialists;
- limited impact in the marketplace.

It is also important to mention that there is a direct connection between the influence factors onto SMEs and marketing characteristics (Figure 1). According the marketing experts (O'Dwyer, Gilmore and Carson 2009: 48) the influence factors act unitary and simultaneously so that they reflect the process character of the full components assembly, which mirorr the importance of adapting the marketing activities and of the strategic marketing planning instruments.

Among the factors that influence SMEs competitiveness can be included, as having a high impact, innovation that must be regarded from the perspective of strategic marketing planning as central element in segmentation, positioning and mix marketing dimensioning.

Thus the main objectives of all marketing activities become the increase of innovation rate, which can be achieved by introducing new products, goods and services or/and technologies onto the market, and superior demand satisfaction both from a quantitative but also from a quantitative point of view.

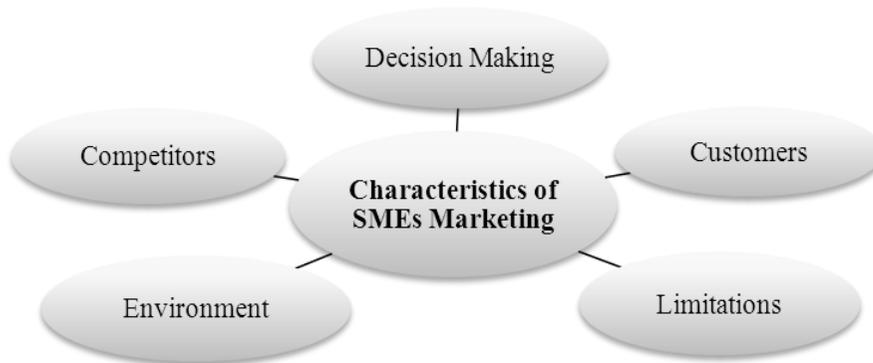


Figure 1. Characteristics of SMEs marketing

Source: Adapted from O’Dwyer, Michele, Gilmore, Audrey and Carson, David. “Innovative marketing in SMEs”, *European Journal of Marketing* 43(2009): 48

Strategic marketing planning – instruments to be used within SMEs

The strategic marketing planning process that operates within SMEs has as starting point strategic planning itself, which can be found within entrepreneurial organization (Mintzberg 2008: 377). According to this valuable classification this type of organization has a simple and flexible structure where the owner/manager coordinates and controls directly the activity. There can be found important differences from the point of view of strategic structure and decisional process between SMEs and large enterprises (LSEs) mostly related to a different point of view regarding planning, where the former are characterized by an emergent strategy (Hollensen 2007: 10), and direct and personal implication of the owner/manager, dominating, thus, the decisional process. The strategic marketing planning instruments must be regarded as part of a complex process of strategic planning of the organization, where at a superior level, can be found four planning activities, included in the three processes of the strategic cycle (planning, implementation, control). These activities are (Kotler and Keller 2008: 41): defining the corporate mission; establishing strategic business units; assigning resources to each SBU; assessing growth opportunities. Strategic marketing planning integrates (McDonald and Wilson 2011: 50) the objectives of the company and reflects the objectives specific to each functional level (Figure 2).



Figure 2. Hierarchy of planning within SMEs

Source: Adapted from McDonald, Malcom and Wilson, Hugh. *Marketing plans: how to prepare them, how to use them*, 7th Edition, Chichester: John Wiley and Sons, 2011: 50

Segmentation as an instrument of strategic marketing planning has an increased importance within SMEs because of the limited resources, thus, ensuring a better financial efficiency and a better understanding of the market, whose division leads to the identification of different groups of buyers with different needs, characteristics and behaviors (Kotler and Armstrong 2008: 63), which in turn create the premises of a correct employment of positioning and marketing mix. Furthermore, it becomes evident that different groups of buyers need different policies and an adaptation from the point of view of product, price, and distribution and promotion mode.

The complex character of segmentation becomes evident in the following stages (Etzel, Waker and Stanton 2007: 144):

- identify the current and potential wants that exist within a market;
- identify characteristics that distinguish among the segments;
- determine the potential of the segments and how well they are being satisfied.

The correct understanding and employment of segmentation establishes the premises of a correct application of the analysis methods and techniques that are used within the strategic marketing planning process. Also, relevant for the identification of the structure of the market is the utilization of the concept of market orientation.

We can mention that we find segmentation from a different perspective as an instrument, which helps in the identification of market structure, and is made operational in the framework of the concept of market orientation, where the variables of segmentation are mostly quantitative (age, income). The new approach for segmentation as marketing instrument employs it both in clients/consumers segment identification and supplier segmentation. Thus, the process implies the division of suppliers in distinct groups with different needs, characteristics and behaviors, that claim different approaches for the relations established between organizations (Day, Magnan and Moeller 2010: 626).

In a logical sequence positioning, as instrument of strategic marketing planning, can only follow segmentation and identification of the segment or segments onto which the company will operate. In the process of identification of the position that the company intends to occupy on these segments must be underlined that positioning refers to the position that the organization or its product has in the mind of the consumer (Kotler and Armstrong 2008: 64), the marketers having the role to differentiate the offer of the organization from that of the concurrence, creating the motivation of acquiring the products and accomplishing another objective at this level to have "the most advantageous position" (Trout 2005: 24).

In the complex process of positioning, the effort to create a distinct image of the organization and a differentiation of the offer in the mind of different customer categories whose needs, wants, demands the organization wants to satisfy, must be accompanied by the identification of the points-of-difference and points-of-parity (Kotler and Keller 2008: 456).

Taking into consideration the previous aspects it can be identified the idea that the purpose of positioning is not the creation of a new and different product, but the modification of the existing relationships with the consumers with relevant influences onto the product, price, distribution and promotion, which reflects the remarkable value of this instrument of strategic marketing planning.

The main objective of the whole strategic marketing planning process and the main reason to concentrate on target segments of clients is to gain the competitive advantage (Perreault and McCarthy 2000: 40), by developing a marketing mix that leads to the superior satisfaction of customers needs in the context of economic efficiency maximization, fulfilling, thus, the two objective functions of marketing.

Furthermore, in the marketing literature are underlined contradictory points of view with regards to strategic marketing and, especially, with regards to strategic marketing planning instruments, which place, for example, mix development in different situations at strategic or tactic level (Varadarajan 2010: 121).

In our opinion the frequent confusions arisen are not necessary the result of an incorrect understanding of the concepts of strategy or marketing tactics, but the result of an incorrect application of the marketing instruments reported to different levels of management.

In conclusion, the strategic marketing planning integrates the processes employed at functional level of the organization, processes that appear in sequence generating objectives and strategies (Figure 3) associated with each employed instrument (Olteanu 2007: 102), whose ranking is not aleatory and can be presented as follows: segmentation, positioning, marketing mix elaboration.



Figure 3. The phases of strategic planning at functional level within SMEs

Source: Adapted from Olteanu, Valerică. *Management- Marketing*, București: Editura Ecomar, 2007: 102

With regards to strategic marketing planning and the specific scientific instruments we can say that a series of experts have appealed, as a result of quantitative and qualitative marketing audit undergone in different SMEs, the lack of strategic planning at SMEs level (Parrott, Roomi and Holliman 2010: 196).

Conclusions

The way in which the strategic marketing planning is employed within SMEs depends, to great extent, on the marketing integration, process directly related to a series of factors such as the nature of the market, growth stage, type of product, good or/and service, quality of management (Reijonen 2010: 279), and, also, the influence of the marketing department from the organization (Verhoef and Leeflang 2009: 26).

As a conclusion, we can mention that at the level of each strategic marketing planning instrument can be found, having as requisite a correct understanding and employment, market, positioning, product, price and distribution objectives and strategies that ensure the market orientation, which, together with entrepreneurial orientation (Baker and Sinkula 2009: 443) influence the success of the SMEs and their long term development.

Regarded from a perspective that cannot ignore the future, but plan it, the SMEs are the seeds of the future large organizations.

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STUDY ON RETAIL BRAND AWARENESS IN RETAIL

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Abstract

Brand awareness, together with other behavioural indicators (sympathy, trust, image, satisfaction or loyalty), is one of the main vectors that has an essential contribution to the outline of brand equity in general and to that of retail brand, in particular. The perception upon these indicators must be taken into consideration by production, service or retail companies in order to be able to identify their position on target markets, and in order to be able to create an adequate strategy that would help them reach the desired positioning.

The aim of this paper is, on one hand, to reveal both the dimensions of brand awareness, and the relationship between these and consumers' brand perception and, on the other hand, to offer a suitable instrument to measure awareness level of various retail chains. Questioning of almost 4.000 consumers indicates a significant awareness of the retailers that have been on the selected market for a longer period of time.

Keywords: awareness, recall, recognition, retail brands

JEL Classification: M3, M31

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Introduction

In order to adequately manage a brand, its owner must understand its value and the advantages that may be obtained through its constant support. Brand equity may be quantified both from its owner point of view and from consumers' one, with the aid of two types of indicators: financial (quantitative) and behavioural. Both types are useful for the fundamentation of strategic decisions regarding correct and efficient brand positioning on the target market. While quantitative indicators are relatively easier to determine, behavioural ones require special attention. Among the quantitative indicators we must mentioned the ones that evaluate company's competitive position (market share, relative market share, commercial network density), market dimensions (competition structure, products degree of newness, size of the market, volume and structure of quantitative and value sales), estimated profits and turnover evolution, relative advertising spending or the costs with brand management (Esch 2007: 73; Hammann 1992: 226; Penrose 1989: 40-42).

Even though behavioural indicators are more difficult to understand because of their relatively abstract nature (Esch & Geus & Langner 2002: 39-47), literature identifies several such examples. Almost all proposed models are mainly based on brand awareness or image – Keller's

and Aaker's models (Keller 1993: 1-22; Aaker 2004: 32). Other behavioural indicators taken into consideration by several studies include brand sympathy or trust; positive relationship between consumers and brand or intensity level of this relationship; brand associations; and loyalty, satisfaction or contentment induced by brand use (Sirdeshmikh & Singh & Sabol 2002: 34; Yun & Good 2007: 12; Backer et. al. 2002: 131).

1. Theoretical models of brand awareness

Aaker considers in the developed model that awareness refers to the level of name and symbol recognition of the analysed brand. Besides that, Aaker also integrates within this approach as determinant behavioural vectors of brand equity, brand loyalty, supposed or perceived quality, brand associations, together with other brand merits, represented by patents, distribution systems or other various marks (Aaker 2004: 32; Esch 2007: 65). Keller shows that brand awareness, together with its image, are the vectors that compose brand knowledge (Keller 2003: 58-102; Keller 1993: 1-22). Keller's merit is that of decomposing awareness in two components: brand recall or active awareness due to its visual and verbal anchors and assisted awareness, or passive that requires its identification through verbal and non-verbal access of consumers' mind associations. Brand image must be understood through brand associations – emotional, conative or cognitive.

Besides the model in which Keller explains brand equity through the use of concepts such as awareness and image, he draws the conclusion that awareness has two dimensions (Keller 2003: 92), consisting of the depth of awareness levels (ease and speed of brand recall) and the width of awareness facets (specific situations when a person is able to remember certain brand characteristics). Departing from brand awareness depth, Aaker builds the awareness pyramid, according to the degree to which a consumer can or cannot indicate or recognize a certain brand (Aaker 1992: 84). Therefore, if a person asked to name a retail brand does not succeed in indicating one, it is considered that the retail brand is unknown. When the consumer can identify the retail brand from a list or when he decides to visit the store only when in front of it, the brand has an assisted or passive awareness. A retail brand may be considered active and to enjoy spontaneous awareness if it is considered before starting an acquisition or establishing the store where to make the purchase. A retail brand may be considered "top of mind" when the consumer recalls it as the first from a short list of brands. It occupies the dominant position in consumers' mind only if the person cannot name a competitor brand (Aaker 1992: 84; Esch 2007: 69).

2. Awareness measurement

Here it can be made a distinction between brand "recall" tests (active awareness) and "recognition" ones (passive awareness). While in the first case respondents are required to spontaneously indicate brands from a certain category, in the second one they must recognize their brand, product, packaging or logo from a given list and to be able to integrate it within a category.

In this respect, time factor may or may not be taken into account, but short thinking time makes it more difficult for consumers to remember several brands, which may represent a way to select the brands with dominant and intense awareness. Meanwhile, the brands order, together with correct or incorrect integration of the brand within a category may represent important indicators for recall tests (Esch 2007: 499-501).

3. Research methodology

In order to check in a suitable way the theoretical concepts previously described, the method employed was the survey. The questionnaire referred to Romanian consumers' perception regarding retail units present in one of the most important and relevant economic, cultural and

social regions of the country. The data collection phase took place in two years under the coordination of one of the two authors (Dabija). There have been used one hundred interview operators and the number of collected questionnaires has reached 5.000. In order to quantify the awareness of investigated units there have been used an open-end question (for measuring unaided awareness), and a close-end one (for revealing assisted awareness).

If in the first case respondents were asked to spontaneously name between one and six stores they could remember, while in the second one they had to choose from a list of 18 local, regional and European retail units present in Romania. The list included at least one example of hypermarkets like Auchan or Carrefour, supermarkets like Billa, cash & carry stores like Metro and Selgros, discounters (Kaufland, Plus), Do-It-Yourself stores (Ambient, Baumaxx), several proximity shops, electronic and household appliances stores like (Altex, Domo or Flanco), specialised stores (pharmacies, bookstores, textile and clothing stores), as well as shopping centres.

Classification on retail formats (hypermarket, supermarket, discount, etc.) has not been introduced to respondents, but it has been carried out by the authors. They have used literature (Barth 1999: 88; Dabija 2010: 77; Liebmann & Zentes & Swoboda 2008: 394-419; Theiß 2007: 491-495; Zentes & Swoboda 1999: 81-85).

4. Results

4.1. Spontaneous awareness

In the case of spontaneous awareness it has been noticed, after response codification, that, in the three research years, over 99% of the respondents have been successful in indicating at least two stores and almost 70% of them named six retail units. As it may be noticed in table 1, among the two research moments, year 1 – 41% and year 2 – 57% it is present a significant increase in the number of individuals that are able to spontaneously name six retail brands.

Table 1. Total number of stores indicated by respondents on the six alternatives of the question referring to spontaneous awareness

			one	two	three	four	five	six	Total number of respondents
			Store(s)						
Number of people that indicated in ...	Year 1	abs.	977	976	967	864	636	403	977
		%	100%	99.9%	98.9%	88.4%	65.1%	41.2%	100%
	Year 2	abs.	1844	1834	1800	1604	1317	1057	1844
		%	100%	99.5%	97.6%	87.0%	71.4%	57.3%	100%

Legend: abs. – absolute frequencies; % – relative frequencies; resp. – respondent

Source: own research;

The distribution of the totalized responses on retail formats, but divided on the two moments of research is represented in table 2. In the category of other retail formats are included specialised stores (textiles, bookstores), electronic and household appliances, Do-It-Yourself and shopping centres.

As it may be noticed, in year 1 consumers spontaneously remember supermarkets (1593 nominations), and the two cash & carry units – Metro and Selgros (1426 nominations). If we take into account the fact that the supermarket format includes five stores, it results that the two cash & carry units express the highest level of awareness. The least known are proximity stores, which in fact have the largest number and have the largest territorial network.

Table 3. Distribution of the nominations of retail formats, divided on the six response alternatives

<i>Number of responses on the six response alternatives</i>							Total	
Year 1	I	II	III	IV	V	VI	Nominations	%
Cash & Carry	275	313	325	279	159	75	1426	29.57
Discounter	81	81	66	84	101	69	482	9.99
Supermarket	342	345	332	290	172	112	1593	33.03
Hypermarket	238	178	143	105	76	40	780	16.17
Proximity stores	19	14	17	15	17	16	98	2.03
Other formats	Shopping centre	10	13	30	22	25	118	2.45
	DIY	7	26	45	54	69	259	5.37
	Electro	5	6	9	15	17	67	1.39
	Specialised	0	0	0	0	0	0	0
Total nominations	977	976	967	864	666	403	4823	100
Year 2	I	II	III	IV	V	VI	Nominations	%
Cash & Carry	215	258	253	243	181	136	1286	13.60
Discounter	156	136	174	163	157	163	949	10.04
Supermarket	617	548	455	363	287	236	2506	26.50
Hypermarket	554	505	531	456	360	260	2666	28.19
Proximity stores	154	136	126	118	91	62	687	7.27
Other formats	Shopping centre	60	71	84	61	50	366	3.87
	DIY	22	68	74	93	75	386	4.08
	Electro	24	42	47	36	61	266	2.81
	Specialised	42	70	56	71	55	344	3.64
Total nominations	1844	1834	1800	1604	1307	1057	9446	100

Source: own research

In the second year of research the situation is distinct. Cash & carry units lose the supremacy and the dominant formats become those of hypermarkets and supermarkets. Intense communication carried out by one of them, but especially the new experience offered by this store, together with the other two new shopping centres, place the hypermarket category on the first place among global nominations (2666). Besides hypermarkets, the supermarket format also registers a significant number of nominations (2506 on the whole), succeeding in fact in a better positioning in the mind of consumers. As it may be noticed, supermarkets obtain 33.46% of the first place nominations (versus 30.04% for hypermarkets), and 29.88% of the second place nominations (versus 27.54% for hypermarkets). Only starting with the third response alternative (after which consumer strives harder to spontaneously remember a retail brand), hypermarkets surpass supermarkets. A possible explanation of this phenomenon probably resides in the proximity of supermarket locations to consumers. Hypermarkets, being developed on large surfaces require a large number of parking spaces, thus being placed in the periphery of urban areas or of neighbourhoods.

For a more exact evaluation of the competitive situation from the perspective of awareness, unassisted awareness analysis must be carried out through a classification of stores. In this respect table 3 presents a ranking of retail brands that occupy the first five positions on each response alternative. In research year 1 Cora hypermarket is the leader of the first response alternative and challenger on the second one. Its dominant position is surpassed by Metro (two, three and four response positions) and by Selgros (five and six). The two cash & carry units thus occupy five of the six response versions.

Table 3. The ranking of the first three nominations for the six response alternatives regarding spontaneous awareness in the three research moments

		Position										
		1		2		3		4		5		
Year 2	Alternative	1	Kaufland	330	Cora	243	Metro	162	Billa	161	ABC ¹	151
		2	Kaufland	238	Billa	190	Cora	177	Metro	166	ABC ¹	130
		3	Kaufland	198	Cora	170	Metro	164	Billa	138	ABC ¹	118
		4	Metro	162	Kaufland	154	Cora	116	Real	114	ABC ¹	111
		5	Kaufland	113	Cora	108	Billa	95	Selgros	92	Auchan	90
		6	Kaufland	95	Profi	79	Metro	76	Plus	71	Billa	66
Year 1	Alternative	1	Cora	235	Kaufland	196	Metro	160	Selgros	115	Billa	110
		2	Metro	178	Cora	175	Kaufland	175	Billa	148	Selgros	135
		3	Metro	193	Billa	151	Kaufland	146	Cora	137	Selgros	132
		4	Metro	169	Kaufland	139	Billa	115	Selgros	110	Cora	92
		5	Selgros	88	Billa	71	Metro	71	Profi	63	Kaufland	61
		6	Selgros	45	Profi	44	Billa	37	Oncos	36	Praktiker	36

Source: own research

Legend: ¹ – Within the ABC stores have been included various proximity units that are not part of a retail chain

It is considered that this situation is explained by the fact that Metro has been present on the selected city's market even from the beginning of the years 2000, and in Romania for over ten years. In this context, it may be talked about an experience (mainly positive) accumulated by consumers with the oldest modern retail unit of the city. Moreover, it is believed that these units have become to a certain extent a sort of benchmark, a comparison base for any newcomer. It is therefore considered that Kaufland supermarket occupies one of the first five response alternatives in year 1, while in year 2 it gains five first positions. In research year 2 appears in the ranking of most often nominated units Real – once (fourth alternative) and Auchan once (fifth alternative).

In order to more accurately stress the position held by the selected retail formats on the six possible response alternatives, it has been utilized a method to weight the absolute number of nominations with the importance score (table 4), as follows (Pop & Plăiaș & Dabija 2008: 165-169): for the retail formats indicated on the first place the coefficient is six, for those on the second position five, and so on until for those on the last place one. By summing up the scores obtained on the six response alternatives it results the corresponding score for each retail format. The two cash & carry units lead in research year 1, followed by super- and hypermarkets. In research year 2 the leader type of retailers are hypermarkets, which are seconded by supermarkets.

Table 4. Classification of weighted nominations on retail formats

Retail format	Score year 1	Score year 2
Cash & Carry	4819	5745
Discounter	3242	1678
Supermarket	7793	5734
Hypermarket	9984	3391
Proximity store	4851	1050

Source: own research

4.2. Assisted awareness

As expected, when facing a list of retail units from all five retail formats previously introduced, respondents were able to easily identify even the stores that previously they had not been able to

spontaneously remember. Data interpretation must be carried out paying attention to the fact that in research year 1 there have been taken into consideration only 18 retail units, while in the second year of research their number rose 30. This augmentation is owed to the fact that several retail chains have entered the analyzed location and several others have announced their intention to penetrate this market. In the first year 3.8%, and in the second year 3.5% of the respondents were able to nominate five or fewer stores, while 76.8% in the first year and 86.7% in the second year could nominate over 10 units.

Table 5. Assisted nominations distribution on questionnaires

Number of nominations on intervals			Number of cumulative nominations		
Year 1	Respondents	Percentage	Year 1	Respondents	Percentage
Up to 5	37	3.8%	Up to 5	37	3.8%
Between 6 and 10	190	19.4%	Up to 10	227	23.2%
Between 11 and 15	617	63.2%	Up to 15	844	86.4%
Between 16 and 18	133	13.6%	Up to 18	977	100%
Year 2	Respondents	Percentage	Year 2	Respondents	Percentage
Up to 5	65	3.5%	Up to 5	65	3.5%
Between 6 and 10	197	10.7%	Up to 10	262	14.2%
Between 11 and 15	354	19.2%	Up to 15	616	33.4%
Between 16 and 20	519	28.1%	Up to 20	1135	61.6%
Between 21 and 25	550	29.8%	Up to 25	1685	91.4%
Between 26 and 30	159	8.6%	Up to 30	1844	100%

Source: own research

If in research year 1, Metro was the retail unit with most assisted nominations (959), followed by Billa (953), Kaufland (939), Cora (930) and Selgros (919), in research year 2 this top five appears to be different. Kaufland becomes the leader (1749), followed by Metro with 1792 assisted nominations and then by Billa (1653), Cora (1554) and Selgros (1520). Analysing absolute and relative frequencies (even though the values are descending) it may be stated that Kaufland became in research year 2 the benchmark unit with whom all the others are compared. However, Metro still holds a powerful position, probably because of the fact that has been the first large store on this market and had represented for many years the only real alternative to the traditional proximity units.

It is very interesting that the four hypermarkets present on the studied market have seen a spectacular evolution. From the total number of possible nominations in research year 1 (977), Cora registered 930, this representing 95.2%. In research year 2 its situation has undergone a significant decrease of over 10% (84.3%). Following the inauguration of one branch each, the other three hypermarkets experience considerable augmentation. Even though between Auchan and the other hypermarkets the difference in the second year of research between the number of actual nominations and the maximum possible one is not so great, varying between 8.9% and 12.1%, it is considered that this situation can be explained through the fact that the image of Auchan and that of Iulius Mall shopping centre, where it is located, are partially overlapped. In other words, consumers, when asked about a food store, respond Iulius Mall and not Auchan, because, paradoxically, the association between the two concepts is too tight. Of course that this situation may also be determined by Auchan's less intense communication strategy, caused by high promotional costs or by its reduced number of stores, which are sparsely dispersed in over the country.

5. Conclusions

Of course, the present research is limited by the subjective inclusion of certain retail units among the ones introduced by interview operators to respondents. In the future it is imperative that a more complete coverage of various retail formats is being achieved. Future studies in this area will allow for better data comparability. The collected data allow the authors to conclude that European retail units have been relatively easily accepted by Romanian consumers, gaining their trust, sympathy and awareness. It is going to be interesting to find out how consumers perception will change as the number of stores of each retailer increases and other competitors penetrate the market.

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EDUCATIONAL INOVATION AND CONSUMER BEHAVIOUR. A STUDY OF STUDENTS' PERCEPTIONS ON THE USE OF E-LEARNING IN CLASS.

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In European and international context of a knowledge-based society, education becomes a strategic element of sustainable economic growth. Developing human capital and adapt its training to the present requirements of the labor market requires major investments both in the formal education system and in individual study. In his position as a promoter of change, the educational environment must actively respond to external challenges, demonstrating a strong flexibility and openness to new.

Implementing the concepts and marketing strategies in the educational environment have gradually led to the development of educational services and improvement of their quality. Focusing on student, the mainstream of marketing, brings in front his requirements and expectations, and the development of the educational strategies aim to satisfy his information and intellectual development needs. School success is reflected in its students achievement as a successful commercial product is observed by analyzing sales figures recorded.

Frequent changes occurring in society as a result of accelerated evolution of technique and technology have made their mark on education. The assimilation of innovations in the traditional educational processes imposed and behavioral changes and adaptations to all education stakeholders. Thus knowing the consumer behavior, the influencing factors and the psychological processes decision making, becomes essential in creating an effective education system.

The emergence of e-learning platforms as a result of the growing importance of lifelong learning and integrating them in the traditional educational environment was a crucial moment in the evolution of educational practices. Focusing on computer, Internet and intranets, e-learning brings education a surplus of interactivity, interaction, responsibility and collaborative learning. Considered as innovative solutions, initially, complementary to the classical teaching techniques, e-learning technologies gradually penetrate the traditional classroom learning environment.

Introducing innovation in the educational environment causes changes in the behavior of all actors confronted with it. Hence, knowing the perceptions of the main consumers of knowledge is a key element in the implementation process of innovation and assessing its effectiveness. This paper aims to develop major behavioral theories on e-learning environments, seeking to establish and explain the attitude of students, the main consumers of educational services, in terms of their perceptions about the introduction and use of these technologies in the classroom.

Considering the results of the presented study may be the starting point in developing a complex behavioral pattern specific of the educational market by integrating behavioral aspects of all actors involved in providing education and confronting them with the main factors of influence.

KEY WORDS: *education, consumer behavior, innovation, e-learning*

JEL CLASSIFICATION: *M31, I25*

INTRODUCTION

In the context of contemporary society, education becomes an activity centered on the development of intellectual capacities of the individual, and highly influenced throughout the life by his desire for knowledge and by his practical experiences. Educational process is seen as a continuous and evolving one, depending on the age and level of preparedness of the individual.

According to the report of the European Commission, European Union countries were to develop by the end of 2010 the most competitive and dynamic knowledge based society (European Commission, 2004: 5). This directions are long –term maintained. Knowledge-based economy becomes a reality of contemporary society and education its main mobile.

New knowledge-based economy considers human capital as the main factor of economic progress and social event. Therefore contemporary society is becoming increasingly linked to the quality of the educational system, the primary creator and distributor of knowledge. The complex process of knowledge consists of three phases: transfer, assimilation and interpretation, and dissemination of information. All these are based on the individual's intellectual capacity, able to provide added value to the information received through an internal process of interpretation of the meaning of objects and events. In this conditions the role of education is not just the mere transmission of information but also providing the necessary specific dissemination through the socialization process. Through education the individual can provide himself with superior adaptation to the environment in order to enhance his welfare and that of the whole community.

The social transformations caused by the emergence, development and direction of the new knowledge-based economy have led to multiple changes in the educational system. Although the general structure of education has remained constant, the attempt to identify the best learning and evaluation option lead to a progressive change in the content of the mandatory superior education system and especially in the compulsory education. Most of them concern the introduction of IT technology in the educational environment as the main agent of transmission, dissemination and evaluation of information and their level of assimilation.

Lisbon Strategy reaffirms the need to integrate technology into the educational environment in order to promote innovation. Information and communications technology is considered “the backbone of the knowledge economy, the main engine of economic growth” and social development. (European Commission, 2005: 20-23).

The European quality standards and the need to adapt to specific requirements of the labor market have forced both the resizing and reshaping of the educational processes in terms of curriculum and teaching techniques used in formal education and also at the level of the continuing education. Now the boundaries of this two types of educational activities are undetectable, thus ensuring the continuity of the formal education through informal education. The specific forms of the educational products change from an unidirectional process to a bidirectional one. The role of student’s feedback grows, emphasizing the importance of interactive, proactive and anticipatory learning. Integrating e-learning technologies in the formal education and their widespread use in continuing education is the solution to the requirements of a modern and effective student - centered educational system.

LITERATURE REVIEW

XXI century education involves the identification and proliferation of three essential elements: professionalism and quality in lifelong learning, creating and developing knowledge and its dissemination. At the base of these three elements is situated innovation, a major importance being achieved by the IT innovation (Weert, 2006: 217). The need to develop collaborative learning contributed to the emergence and widespread use of virtual environments as a social communication support and educational interactive learning. E-learning becomes an important driver of educational change and of its adaptation to the requirements of European integration.

Ever since the first e-learning technologies, many researchers have attempted to define the typology of these educational resources based on specific tools and processes which underpin their functionality in order to identify the degree of efficiency in the acts of teaching and learning. Derek Stockley defines e-learning as "the delivery of instruction or training program through electronic means. E-learning involves the use of computer or electronic media to ensure the transfer of educational material" (Stockley, 2003: 32). The definition identifies the main characteristic of e-learning environment (use of computer or electronic media), but only indicates the transfer function of the systems presented, neglecting their contribution in the reception, detention and interpretation of materials delivered and interactive feedback results.

Considering the main objective of the e-learning platforms – to facilitate the transfer of information and their assimilation with maximum efficiency, such systems have been designed and developed based on the mental processes taking place in the minds of the learner.

Sigal, M. (Sigal, 2002: 31) explains the typology of e-learning systems starting from the four processes of knowledge identified by Piaget: assimilation, accommodation, balance and imbalance. Knowledge creation process involves interpreting the information received from others and dissemination of new information (feed-back) to the external environment. Through learning, individuals develop their memory and acquire the capacity to analyze information received from the environment and to produce knowledge.

"Today we are facing a paradigm shift in the development of the learning support systems: in recent years, their development was mainly focused on technology and now it focuses on applying specific concepts of human behavior in using new learning, communication and business technologies. Recent neuroscience research highlights together with the cognitive elements, the predominant role of emotions, intentions and social factors in learning. " (op.cit. Trausan - Matu, Cristea and Udrea, 2005 : 22). This requires a deep knowledge of students' perceptions on the use of such innovative technologies in the classroom, and so explaining student's attitude (acceptance or rejection).

The main behavioral approaches concerning e-learning placed the student in the center of its interests. Integrating e-learning platforms in daily life especially in education cause major changes in how people learn, "concentrating on the needs of students rather than on those of teachers or educational institutions" (Cross, op. Cit. Aldhafeeri, 2006: 711). Students are parts of a whole – the e-learning community, therefore their involvement in the evolution of the entire community is essential to its existence.

Given the development of e-learning based on a pedagogical model that assumes students' responsibility for their study, Porras - Hernandez (Porras - Hernandez, H., 2000: 385-392) speaks about the theory of self - regulation in the study of students, considering this to be a very important feature in increasing academic achievement through e-learning environments. Motivation and individual self – control are also relevant factors in ensuring a coherent community.

"In the area of e-learning, students are considered consumers who should receive quality services" (Rossett, op. Cit. Aldhafeeri, 2006: 711). Providing high quality educational products by adapting them to specific consumer requirements is one of the objectives of the educational e-learning systems.

Studies carried out in order to identify students' perceptions on the use of e-learning highlighted the advantages and disadvantages of these environments. Patricia Borstorff and Keith Lowe (Borstoff, Lowe, 2007:19) reflects through their research the main benefits perceived by students: flexibility and the convenience offered by these technologies during individual study and also in formal education. Most of those questioned also identified as the main disadvantage of e-learning environments the limited communication with the teacher.

Based on the study of perceptions developed by Lowe and Borstoff but taking into account all the other research on consumer behavior within the e-learning communities and the premise of student – centered activities, this paper aims to identify students' perceptions on the use of the e-learning platforms in classroom.

RESEARCH METHODOLOGY

The present research aims to identify the perceptions of students on the use of e-learning platforms and on the integration of e-learning in Romanian education system. To achieve this goal were used specific tools and techniques of qualitative research. Through in-depth interviews was identified the general perception of secondary school pupils on e-learning and also the causes that led to it. The semi-guided interviews were made based on a conversation guide shaped around three main objectives: to determine students' perceptions on e-learning platforms, determining the perception of quality in educational environment and to identify the main advantages and disadvantages of e-learning environments. The sample includes a total of 24 people, high school students, with an equal gender distribution. 60% of respondents go to an urban area school and are aged between 16 and 18. Group selection was not guided by the use of these technologies in schools because it aims to identify general perceptions of e-learning environments and not that which refer to a specific use.

RESULTS

The research reveals an overall positive perception of the students interviewed, regardless the use or the environment in which they entered in contact with e-learning. Most of those interviewed (80%) reported personal use of e-learning platforms during individual study and denied the use of innovative technologies within the school to which they belong.

Asked to define an e-learning platform in three words, many respondents were hesitant and late in providing the answer. Mostly the e-learning platform was defined by terms such as "Internet", "Programs", "projections", "interaction", "PC", "image". Very often the term used is "team" which outlines the students perceived contribution of e-learning in creating a collaborative learning environment. The terms used by the subjects of the study are correct, most components or features delimiting basic e-learning platforms.

In the case of the assisted associations students have designated e-learning platforms by linking their characteristics with the attributes of an animal. Over 70% of students have associated e-learning systems with a cheetah, based on speed as the main attribute. 15% of the students participating in the study believe that an e-learning platform is "friendly and nice" like a Koala Bear, and only 2% associate it with a repulsive rat. Even if the subjects have never used an e-learning platform, they associate positive characteristics with it.

Regarding the advantages and disadvantages of e-learning, students have identified as main advantages interactivity, the evaluation methods used and the mix of images and audio elements and video presentations within the e-learning lessons. Most of the respondents believe that e-learning classes are more interesting and helps them better retain the information transmitted by the teacher. The agreement of students is expressed also on the question of obtaining superior results by using teaching technics based on multimedia technologies. Although consider the lessons taught in e-learning laboratories to be more interesting than traditional lectures, students participated in the study do not consider that their level of attention would be increased.

CONCLUSIONS

In Romania, although the formal education area remains mostly public, the growing importance of lifelong learning based on the use of online environments, and also the actual pressure of the

labor market changes, enabled the penetration of computer-assisted teaching systems in classrooms.

The requirements of the new economy and the state of the Romanian education require increasing investments in education in order to align the local education system to European standards and global education. To function effectively, educational institutions, regardless their level, must know and consistently measure the quality of educational services and products provided by comparing them with their students' requirements.

Their quality is the main competitive advantage it may hold the existing competitive educational market. Providing quality service should start from the knowledge of demand, consumer needs and expectations, as they participate in development of a product or service and therefore can decisively influence the final performance and quality.

Identifying students perceptions on the use of e-learning platforms in the classroom allows shaping a current image on the quality of the education environment and the guidance that it should follow to meet the requirements of the main consumers. The recognition and appreciation by the students of the main advantages of e-learning platforms and their contribution in improving the education system are premises for continuing innovative actions within Romanian education sector. The receptivity manifested among children about the use of innovative technology is based on two underlying principles: interactivity and collaboration in teaching – learning processes. Developing an e-learning community and its integration not only in continuing education but also in compulsory education facilitate the adaptation of the Romanian education system at the European and international standards in quality and efficiency.

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VISUAL POLLUTION: A NEW AXIOLOGICAL DIMENSION OF MARKETING

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Everyone's belief is that marketing plays a fundamental role in all economic or uneconomic areas of business. However, what becomes very clear is that, in addition to the many positive aspects that it generates, marketing produces unwanted effects as well.

The paper tries to prove the relationship between marketing and axiology (its value and its perception on the people), on the one hand, and one of its most obvious effects - visual pollution, which already starts to be in the attention of those who can counter it, on the other hand.

Value, as a concept, is a result of a long and laborious research, both economic and uneconomic (philosophical, psychological, etc.). The visual pollution and the ecological architecture are recent approaches and it cannot be said that there is a very rich experience or a proper literature in this domain. But the interest is growing undoubtedly.

The authors consider that the demarche of the paper, to sit marketing, value and pollution alongside, is at the beginning of the road and certainly will arouse the interest of further research.

The paper is the result of an office research of secondary sources of information. They are limited and also limiting, the domains being studied separately. The result of the paper is the noting on the fact that marketing can be extremely harmful. We agree with the idea that marketing supports businesses and the economy of an area, but it is better to be aware that the pollution it produces is increasingly significant so the rules by which marketing plays must be rewritten.

If the authorities, the business itself and those involved in education will focus and will exactly understand their role in a sustainable development of the society, than the aim will be achieved. We believe that the authors' concerns, which are dedicated to the idea that by means of marketing one should not destroy but build, will be of public interest as well.

Keywords: axiology, value, pollution, marketing, ecology.

JEL classification: M31, Q56

1. Introduction

Nowadays, the conviction of everyone, professional or not, is that marketing undoubtedly plays a fundamental role in all economic or uneconomic areas of business.

According to the marketing study in terms of axiology, we can highlight the values followed by this activity, compared with those generally accepted. We define value as a specific axiological relationship between a natural or created object and the human subject, by means of which he expresses his appreciation for its qualities that are meant to satisfy some specific needs. Value

appears as well as the relationship between subject and object, in which by means of polarity or polarization and of hierarchy, we express our differentiated appreciation for certain things or their qualities, for certain persons or human acts, for certain works created by virtue of their ability to satisfy some specific needs, aspirations or interests.

2. Concepts used

A classification of values is as follows: economic values, legal values, political values, ethical values, historical values, aesthetic values, religious values. The first four values are determined by the constituent and regulating functions of the social life. The other three are determined by the frame in which the social reality exists and evolves.

For our study we only discuss three of these values, which are directly related to marketing, and have impact on this activity, namely: economic, ethical and aesthetic values which, depending on the way they are perceived, lead to visual pollution.

The economic value is generally understood as the awareness of the usefulness of the goods comparing to others, which satisfies a certain need. The needs are physical and mental, so we distinguish between two kinds of values: spiritual values and material values. The economic values are material. The value theory is more likely a theory of cost, since it addresses a crucial moment of the value, that meaning the cost, a labor required to produce the goods and the limited usefulness.

The economic values are constituent for the social reality; they represent only a part of the social values that span multiple levels with different functions in the social life.

The ethical values relate to our desires which can be numerous, so we always require the same question: Which is the best goal? For some people it is happiness for others wealth, virtue, etc.

The psychological theory states that a ethical value has a mental basis, it is a product of the self will, of the will to upgrade one's personality.

The analysis of the moral conscience takes into account the opposition between sensitivity and the responsibility imposed by the categorical imperative, because the ethical value is an imperative that we all must obey.

The ethical value has life as an ultimate principle and the ethical laws are natural laws, whose inobservance brings evil. So, shall we sacrifice the ethical values to the detriment of the economic ones?

The aesthetic values relate to the aesthetic pleasure by the existence of an object that has a value and a subject for which that value exists. Beauty is the central aesthetic value, to which all the other ones report. By their specifics, the aesthetic values are significantly related to sensitiveness. The aesthetic values can be intuited, felt, experienced, represented and imagined. And then we might ask ourselves: where is the beauty in all the examples that will be further presented?

3. Research on the marketing negative effects on the environment

Mankind has a spectacular rate of development and marketing has the main position in greatly contributing to this development. This one actually "pushes" forward the world economy and the contemporary society, but it is also responsible for many negative effects which are difficult or even impossible to be repaired, attracting more and more criticism this way.

The oversized consumption of resources (e.g., the paper used in much larger quantities than normal, the lights burning all night), the shopping addiction, the excessive consumption of unhealthy foods leading to obesity, cancer, etc. are negative aspects that began to be reported a few years ago. Their influence reflects on individuals, as consumers, their age being in a rapid decline.

We live in a dense environment, with attempts to influence. Much of the population seeks to make the others conform to their demands. The estimates of this type of research suggest that a

person can receive up to 400 persuasive marketing calls during an only single day. Managers boosting the productivity, a policeman directing the traffic, a vendor selling something are numerous attempts to influence every day.

In fact, the company is a massive group of people seeking for influencing, persuading, requesting, asking, urging, or manipulating each other. We call it society because it convinces us instead of physically restraining us. We cannot even imagine what it would be like if every attempt to influence would be replaced by coercion: the store owner would hit the customer who would not buy the shirt, the boss would hit the employee to make him work harder, the police officer would beat the driver who would drive by 60 km / h in an area of 50 km / h. After a typical day, everyone would be a physical wreck.

Persuasion, on the other hand, allows the work in a company to be performed without problems - while the physical coercion stops it. The successful conviction is when the physical coercion is useless. As a result, the society benefits from persuasion and those who do not know how to persuade benefit the most from society.

Lately, another negative effect is quickly to install: pollution, which is a consequence of the oversized and unjustified consumption. The forms of pollution are: air pollution, water pollution, soil pollution, radioactive contamination, and noise (sound) pollution, thermal and visual pollution. It is noticed the possibility to group them into three basic categories: chemical, sound and visual.

We shall next refer, in detail, to the final form, the visual pollution, which seems to be the least dangerous. This statement can not be demonstrated though because the „evidence” that show exactly the opposite are very numerous.

We live in a civilization based on image, this phrase becoming an automatism in expression which seems to not send any message any more. The initiator of the concept of society of the spectacle, derived precisely from this media explosion, G. Debord argues, „Where the real world changes into simple images, they become real beings and effective motivations of a hypnotic behavior. The spectacle, as a tendency to make the world, which is no longer directly perceptible, be visible by means of various specialized mediations, finds the sight as the privileged human sense, as once was the touch; the most abstract and the easiest to mystify sense perfectly corresponds to the generalized abstraction of the contemporary society” (Pascu 2002: 97).

In a simplistic and easy to understand manner, the visual pollution can be defined as the damage to the landscape issue, in a manner which can be perceptible to the human visual sense, and with effects on the psyche of the person. In the matter of fact, everything that is around and does not delight us and that has even a negative impact on us and on our psychic as well can be defined as visual pollution. Although the negative effect is much less harmful than the one of the other forms of pollution, by the full accumulation of the specific factors, the issue becomes a drama. We can state as visual pollution the vandalized buildings left in ruins, the abandoned sites, the large advertising blades placed on the vertical surfaces of the high blocks (damaged by weather and environmental pollution) and on the large stores in cities, the display on the side roads which has lost its validity, but which nobody ever updated, the parking spaces organized for a possible halt or garbage disposal, but which have been destroyed, and even panels that advise to protect the forest, but which have themselves become a pollutant because they are rusted, warped and torn. Examples may continue indefinitely.

And since this phenomenon involves the person's visual sense, we cannot limit to the quality of "images", but also to their quantity, which induces the individual in a state of hypnosis, in which he can no longer discern. Most critics of this category are directed against outdoor advertising, because the print ads in the newspapers are easily ignored by turning the page and the ones in television by changing the channel. As shown, both the “by mail” advertising as well as the billboards and the street display lead a struggle against those who wish to apply legal restrictions

against the use of these promotional techniques, which use images par excellence (Russell and Lane 2002: 870).

It must be mentioned that all living organisms (plants, insects, birds, animals, humans) are affected by visual pollution.

In this paper we shall refer primarily to people, but also note that anything that affects other creatures listed above, actually distorts the functioning of the ecosystems and hence of the human. If the bright light prevents insects to move, they can no longer be food for birds, the latter ones receive and transmit their influences in their turn, and the weaknesses chain continues.

Visual pollution on humans is manifested in two forms which have been already recognized:

- *direct*, the effects being psychological and physiological;
- *indirect*, the effects being various, from road accidents caused by distraction, to the economic decline of a community.

The authors, A. Dumitrescu and D. Manolache, define the visual pollution by the presence, in the visual field, of some human-made implants, which are in disharmony with the landscape and which promote excessive, depressed or subversive messages, (www.imst.pub.ro/TCM/Dumi/Visual_Pollution.pdf).

This is strongly felt in the large urban areas where the aggressive outdoor advertising (posters, banners, billboards, pictures, neon etc.) became more than just unbearable. Experts consider that Graffiti, for example, has a strong negative influence, which may cause depression and acts of vandalism.

The **visual pollution sources** are:

- *administrative negligence* – the local public administration loses control over what is built or assembled in public spaces, it does not know what and where is displayed, does not solve the problem of buildings in ruins no matter who the owner is.

Logic, architecture, cleanliness, space harmony must be kept in the urban jungle, but they are all suffering because of the business interests and the obtaining of the profit.

It is well known the skyscraper building type, with 19 floors, ground floor and four underground levels, called the Cathedral Plaza, built near St. Joseph Cathedral in Bucharest by Millennium Development Building.

Other changes in the environment are determined by the location of all kinds of items (terraces, public transport stations, garbage cans, huge panels so powerfully illuminated that they can blind drivers at night, stalls, tents, booths installed for commercial purposes, different network cables, etc..) on the public spaces.

- *excessive advertising* - literally suffocating because not even the green areas (trees, land, parks, etc..) are not spared in the desire to ensure good visibility. The existence of giant billboards, outdoor display in general, which is present from the means of transportation to garbage bins is also suffocating.

A frequent complaint against advertising is that it is simply too much advertising and that is annoying. With the rapid introduction of the new communication technologies, the fragmentation and the interactive nature of the future advertising vehicles will undoubtedly reduce much of this criticism, obviously, when the interactive media will allow consumers to select programs, advertising or info-advertising you want, it is unlikely that advertising will be considered troublesome.

While the economic contribution of advertising is, specifically, the major preoccupation of both companies and consumers, in the recent years its social implications are increasingly analyzed. Almost everyone, even the fiercest of his critics, agree that advertising plays an important role in informing consumers about the new products, locations, prices and markets. These are the economic functions of the institution of advertising. On the other hand, the social and cultural

roles of advertising are much less clear and are increasingly becoming a subject of discussion in some circles.

Many observers point out that advertising is both a **mirror** and also a **shaper** of public opinion, social manners and standards. They state that by the absolute value of exposure, advertising sets a social agenda on what is expected, what is fashionable and what is of good taste for a considerable number of people. This influence is manifested especially on young people, poorly educated and impressed people.

But image is not universal language, even if there is an illusion that it forwards meaning because of its analog capabilities. There is this confusion between perception and interpretation

- *vandalism* – from the Graffiti mentioned above to offensive messages, obscenities, street markings of different groups, all made without the owner's consent of course.

The study of the individual and group territoriality is important in terms of reactions that can be caused by an intrusion into the intimacy of a person or in a group territory. Thus, the proxemical research, discipline that deals with the study of nonverbal communication through fixed distances between individuals reveals the characteristics of each culture regarding this issue. The communicational action in ET Hall's studies shows the trials of individuals, often unconsciously, to give a certain distance of communication (intimate, personal, social and public) (Pascu 2002: 79). The failure to comply, as the studies in this area emphasize studies, determines the feedback from participants in the process of communication, such as: the increasing of the blood pressure and heart rate; confusion; the trying to regain territory or the acceptance of an intruder; the lowering performance; the increased verbal aggressiveness; the diminishing of the sense of cohesion within the group.

According to the survey, we shall refer forward to the reactions resulting from intrusion. We have as types of intrusion the following: *violation of territory* by using the territory without permission and looking at someone when they are not expected to be observed, *invasion of territory* by trying to „grab” the group territory and *land contamination*, namely to leave something undesirable on the territory of a person/group.

4. Results of the authorities involvement in the visual pollution

In front of this wave of attacks on the human security made in the name of progress and marketing, the authorities in some states and cities have passed effective measures. Of a particular importance in this context is the need to develop anticipatory policies and to prevent, mitigate and monitor any adverse impact on the environment in general and in a transboundary context in particular.

In *Norway*, severe restrictions have been imposed in Bergen since 1990.

The great city of *Beijing* is recognized as a pioneer of this struggle. The layout of any street advertising is reviewed by a special commission, which sets out its beneficial or polluting role, the harmonization with the urban area, and the possible distraction of drivers in congested areas with heavy traffic and only after that it is approved.

In the *U.S.A.* we are witnessing a limitation on the size and number of panels according to various criteria, such as the number of houses on a street. In certain areas there are allowed only small panels, the large ones being history. States such as Alaska, Vermont, and Maine have partially or totally banned them and in about 1500 cities, the outdoor advertising is prohibited.

The Czech Republic took a number of measures on the visual pollution caused by the excessive use of neon.

The mayor at *Moscow* has introduced a regulation to reduce the size of the outdoor advertising.

But the most radical response was recorded in *Brazil*, in the largest city, Sao Paulo, whose population has exceeded 11 million. The outdoor advertising is considered illegal here. The metropolitan local council decided it in September 2007, which triggered strong reactions from

firm's discontent. For example, lawyers from America's Clear Channel Outdoor, the largest firm in the world, considers this decision as unconstitutional, saying that it would lead to the destruction of business and, therefore, they sued the government. The „Clean City” Law prohibits advertising on public transport and strictly regulates what can appear on the frontispiece of the shop signs.

The residents have noted that Sao Paulo became a more beautiful and clean city after this demarche. Taking the example of the city which became free in terms of advertising and being inspired by its success, the authorities in Rio de Janeiro, Porto Alegre and Brasilia discussed similar measures.

The authorities in **Seoul** invest in innovative technologies and construction that respects nature, and they are also supported by the largest research and development institute in Europe, Fraunhofer Institute - Germany. The researchers here are working on developing an environmental project involving a prototype building efficiently built in point of energy, incorporating all the principles of modern technologies of saving the energy and using alternative energy like the sunlight, the wind and the geothermal heat.

The most recent reaction of the authorities in **Seoul**, however, is on the economic crisis and the increasing of oil prices, fueled by the turmoil in the Middle East and North Africa. They announced severe penalties for the „insignificant” lighting starting on 1 March 2011. Thus, many commercial buildings, bridges, houses etc. are obliged to shut down the lights after midnight. Amid the measures taken, the countries, regions and cities mentioned above are increasingly becoming a tourist attraction. In their promotion, there are sold as items of attraction the restrictions mentioned above, which is likely to offset any losses caused.

The localities and the urban population in **Romania** face the same problems and the voices and initiatives in the domain begin to be visible. For example, on 27 March 2010, 37 cities marked the Earth Hour by interrupting the lighting of prominent buildings in the hours 20.30 to 21.30. In 2011, the same action took place on March 26 at the same time slot, with extensive participation of 50 cities, which synchronized with the similar demarche of a great number of people, more than one billion in 5000 cities in 130 countries.

The increasingly used concepts are *the ecological landscape* and *the ecological architecture*.

Formed about 40 years ago, the *ecological architecture* has not yet been clearly defined. Two approaches are highlighted: the “green” (ecological) architecture and the sustainable one. The first one represents the practice of increasing the efficiency with which buildings and adjacent land use and take energy, water and materials, and the reducing of the negative impacts of such buildings on the environment and human health by improving the design, construction, use, maintenance and demolition, and the last one means the conformation of the „green” architecture with the principles of socio-economic and ecological sustainability. In practice, the ecological architecture products are represented by the passive housing, with zero emissions, green, ecological, durable and sustainable.

About *ecological landscape* it can be stated that it represents the dialogue between the buildings and their surrounding area, in compliance with the environmental regulations. In such an organization there cannot be outside display to jam this dialogue. Finally, the public spaces will not be used for private business, and the reducing of pollution will lead to social benefits that will delight many.

Even the problem of plastic waste, which often fly blown over us and which is known that they are not biodegradable has a very simple proposal to be solved, recently coming from a 16 years old student in Canada, Daniel Burda. He discovered the process of decomposition of the plastic bags in less than three months. Some water, very little carbon dioxide and Sphingomonas and Pseudomonas bacteria are needed for this.

The outdoor advertising supports businesses and businesses support the economy of an area. It is known that large amounts are collected by renting the public spaces and the rights of the display.

5. Conclusions

One will not definitely give up this kind of trade - *public spaces for information by means of advertising and money by renting*, due to the earnings. People are aware of the both sides of the phenomenon; the measures can be seen, especially in the local communities. It is a vicious circle, only that the rules will be better written! That is why business will give the both sides a strong impulse to work together.

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WIRELESS ADVERTISING: A STUDY OF MOBILE PHONE USERS

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Topic: Using a qualitative methodology, this study attempts to provide a general framework of the functions of mobile communication, and to identify the specific preferences of mobile phone users regarding the commercial messages received on their personal devices.

Research objectives: (1) To identify the specific characteristics of mobile communication as perceived by mobile users; (2) to define and analyze the functions of wireless communication as perceived by mobile phone users; and (3) to investigate users' preference regarding the content of commercial wireless communication.

Previous research: Bauer et al. (2002) identified time, location, information and personalization as relevant acceptance factors for mobile advertising. Barwise and Strong (2002) developed a conceptual model, arguing that social norms, user's motives, mode, time, location and personal characteristics will affect the processing of mobile information by consumers. Tsang et al. (2004) evidenced the influence of entertainment, informativeness and irritation, while Bauer et al. (2005) argued that consumer attitudes are influenced by perceived information, entertainment, and social utility. In a similar study, Xu and Gutierrez (2006) tested the effect of entertainment, irritation, informativeness, credibility and personalization on the attitudes of Chinese consumers.

Research methodology: First, a series of academic and practical articles and reports have been accessed in order to assess the existing knowledge on this topic. Second, five focus groups have been organized with six mobile phone users, aged between 20 and 40 years old. Each focus group comprised an equal number of male and female participants. The focus groups lasted between 45 and 60 minutes and addressed three main issues: the specific characteristics of the mobile phones as a commercial communication media, the functions of mobile phone communication, and the specific preferences of mobile phones users regarding the content of commercial messages.

Findings: The participants demonstrated an active attitude regarding mobile advertising, which they think it has the potential to revolutionize the practice of commercial communication, by focusing more on consumer's personal needs and circumstances.

Implications: This transformation cannot be realized without increasing the interactive control of mobile phone users' over the functionality and content advertising messages. Although the required technology already exists, it seems necessary to create new applications that can combine the advantages of customer-, product- and location- centered communication.

Original contribution: Previous studies often used an analytical approach, highlighting specific variables regarding consumer perception or technology adoption. Using a qualitative methodology, this study provides a general framework of the functions of mobile communication, and identifies the specific preferences of mobile phone users regarding the commercial messages received on their personal devices.

Keywords: wireless advertising, mobile phones, functionality, content, users' opinions

Cod JEL: M37

I. Introduction

Wireless communication evolves constantly, determined by the introduction of new technologies and the apparition of new customer demands (Park et al. 2008). However, despite the potential of wireless advertising, marketers have quickly understood that the specific characteristics of mobile

devices and communication require an adaptation of the style, type and content of advertising messages. For example, considering the personal nature of the mobile phone, commercial messages should be tailored in accordance to customer needs and preferences (Haghirian et al. 2005).

However, in comparison with internet advertising, mobile advertising is still insufficiently understood. Existing studies are often using an analytical approach, which highlights only specific variables regarding consumer perception or technology adoption. Using a qualitative methodology, this study attempts to provide a general framework of the functions of mobile communication, and to identify the specific preferences of mobile phone users regarding the commercial messages received on their personal devices.

II. Literature review

Mobile advertising was defined as “advertising or marketing messages delivered to portable devices, either via synchronized download or wirelessly over the air” (Laszlo 2009: 29). The main advertising methods/formats that were described in the literature were the SMS and the MMS (Park et al. 2008; Samanta et al. 2009), although the development of mobile internet creates a new possibility of mobile interactive advertising (Laszlo 2009).

The potential of mobile advertising has attracted many researchers who attempted to identify its success or adoption factors (Park et al. 2008). Bauer et al. (2002) identified time, location, information and personalization as relevant acceptance factors for mobile advertising. Barwise and Strong (2002) developed a conceptual model based on the information processing theory, arguing that social norms, user’s motives, mode, time, location and personal characteristics will affect the processing of mobile information by consumers. Studying the consumer attitudes toward wireless advertising, Tsang et al. (2004) evidenced the influence of entertainment, informativeness and irritation, while Bauer et al. (2005) argued that consumer attitudes are influenced by perceived information, entertainment, and social utility. In a similar study, Xu and Gutierrez (2006) tested the effect of entertainment, irritation, informativeness, credibility and personalization on the attitudes of Chinese consumers.

A qualitative study by Peters et al. (2007) identified several categories of motives that determine customers’ adoption of wireless advertising: process motives, social needs and content needs. On the other hand, Jun and Lee (2007) tested seven factors that may influence consumers’ attitudes: mobility/convenience, fashion, information, entertainment/relaxation, functional service, multimedia service and sociality, but only the impact of convenience and multimedia service were statistically significant. Using a quantitative approach, Ma et al. (2009) attempted to identify the factors determining consumers’ acceptance of mobile advertising. Their findings indicate that perceived message credibility has an important impact on the adoption intention, and the consumers’ ability to adopt high technology, inertia, and their motivation also affects their personal attitudes. Recently, Vatanparast and Butt (2010) investigated the factors affecting the use of mobile advertising, considering four categories of factors: (a) consumer factors: privacy, purpose and performance, (b) message factors: content, credibility and customization, (c) device factors: interface, interactivity and intelligence, and (d) media factor: price, process and policy.

Despite the importance of the existing research, it is easy to notice the existing contradictions between various research findings. This limitation might be due to the specific definition, conceptualization and measurement of various variables, or by a variation in the empirical setting. The identification and statistical validation of quantitative variables is certainly important, but quantitative studies cannot fully describe the personal attitudes and opinions of specific consumers, and cannot take into account their specific circumstances. In order to further develop the understanding concerning the perceptions and attitudes of users towards commercial wireless communication, this study applied a qualitative approach.

III. Research methodology

In order to investigate mobile phone users' preferences regarding commercial wireless communication, the following research objectives have been defined:

1. To identify the specific characteristics of mobile communication as perceived by mobile users.
2. To define and analyze the functions of wireless communication as perceived by mobile phone users.
3. To investigate users' preference regarding the content of commercial wireless communication.

In the first stage of the research process, a series of academic and practical articles and reports have been accessed in order to assess the existing knowledge on the topic of commercial wireless communication and to develop a theoretical research framework. Then, in the second stage, five focus groups have been organized with six mobile phone users, aged between 20 and 40 years old. Each focus group comprised an equal number of male and female participants. The focus groups lasted between 45 and 60 minutes and the moderated discussion addressed three main issues: the specific characteristics of the mobile phones as a commercial communication media, the functions of mobile phone communication, and the specific preferences of mobile phones users regarding the content of commercial messages.

The discussions have been recorded, and then transcribed. The collected texts have been evaluated using qualitative thematic analysis based on indentifying and interpreting the convergent themes expressed by the participants in the focus group.

IV. Presentation and discussion of findings

The specific characteristic of wireless communication and advertising

The participants to the focus groups outlined that the most striking features of mobile communication, are, in order, mobility, personalization and immediacy.

"Mobility is the essence of mobile communication, and the most important relative advantage in comparison with traditional communication media" [S.V., 37 years, male]. In addition, mobility is pushed at extremes with mobile phones and other wireless devices, since the user is carrying the communication devices with him/her, and can be contacted anywhere and anytime. When mobility is reduced or eliminated, either because the user has lost/forgot the mobile phone, or because of limited network coverage, the user feels isolated and unsatisfied: "If my mobile phone is not working and I need to call my husband it can be very dramatic, since now it is much more difficult to find public fixed phones. Everybody has mobile phones and expects you to use them as well" [A.T., 34 years, female].

Personalization was the second most important feature of mobile communication identified by respondents: "A mobile phone is a very personal tool. When I call the number of my mother I do not expect anybody else to answer the phone. Sometimes it is my father who picks up the call, and then for several seconds I feel lost – did I call the wrong number?" [F.B., 22 years, female].

On the other hand, the expanded functionalities of mobile phone have increased their personalized utility, sometimes creating a sense of dependency: "I do not know what I would do if I would loose again my mobile phone. It happened to me once, a year ago, and for two weeks I felt completely helpless" [A.L., 26 years, male].

Immediacy is related with the facility to exchange information over mobile phones: "When using the mobile phone, the communication is like real-time, and you can solve immediately any existing problem" [A.J., 21 years, female]. Immediacy can also be perceived sometimes as a burden by some mobile phone users: "It happens to me quite often to receive a phone call and to think 'oh my god, here we go again, I wish they would live me alone for a while'. You can say that I am quite a private person and too many unexpected intrusions in my personal life irritate me" [S.B., 28 years, female].

As it can be clearly seen, there is a clear connection between the functional and social characteristics of mobile phones and the specificity of mobile communication, both in a positive and in a negative sense. Another interesting element is the complexity of the expressed views – mobile communication is not idealized, the participants outlining both its positive and negative aspects. The negative aspects appear especially when the user lacks control over the flow and the frequency of communication: “Although I consider the mobile phone as a highly useful device, I do not like to be harassed by anyone who wants to call me. I take great care to give my mobile phone number only to close friends, and I always emphasize that I expect them to exercise restraint in using it”. [M.G., 37 years, male]. This tendency towards increased control that was evidenced by some participants indicates an important limitation in the way in which the mobile marketing campaigns should be designed and implemented. The complexity of the situation is increased by the fact that the personal threshold of tolerability (or irritability) is different from one person to another, depending on their personal history and personality.

The main functions of mobile communication

The respondents have identified four main functions of mobile communication: information, entertainment, advertising, and personal communication. In two of the focus groups, the personal communication function was considered as the main feature, which, in some respect, incorporates the three other ‘secondary’ functions. However, in the other three groups the participants reached the conclusion that the concept of personal communication is too vague and too general to represent a function, indicating in priority information, entertainment and advertising: “These three functions are really the core of mobile communication. Personal communication can be considered as the general method of communication, because the mobile phone is so personal..., so you can say that any mobile communication in which you participate represents a form of personal communication” [D.J., 25 years, male].

Many participants indicated however, that at the level of mobile messages, it is often difficult to identify only one of these three classical communication functions, the tendency being to create communication with a hybrid functionality (Alcatel 2002; Apostolou 2007; Westerink et al. 2000): advertainment (advertising + entertainment), infotainment (information + entertainment), and infortising (information + advertising). The main reason for the use of these hybrid functionalities is their increased efficiency at communication level: “Pure advertising is often not attractive enough on the mobile phone, because the user is immersed in other various activities, so to increase motivation it has to include a high dose of entertainment” [M.B., 34 years, male].

Among these three hybrid forms, infortising was not yet defined by the academic or practical literature. However, the participants outlined the necessity of the concept, and their preference for infortising messages in commercial mobile communication: “Infortising represents an advert that is mainly informing you about a specific product or service instead of attempting to persuade you using humour, sex or subliminal images. Personally I would like to have more of these, especially on the mobile phone, since I do not have the time to watch an advert which does not tell me something clear about the product, its benefits or its location.” [L.D., 35 years, female].

Ultimately the main problem in using these communication functions for marketing is the lack of interactivity and consumer control: “They [the marketers] are still using the old advertising techniques, forgetting the characteristics of the new technology. A message is designed and sent to several thousand people without attempting any real targeting or interaction ... Because of this the success is so low: you receive a message that you don’t want, about the wrong product, at the wrong moment ... They should use some filters defined by consumers; for example, sometimes I’m in the mood to watch advertainment application, like playing and advergaming or something, yet other times I’m more in the infortising mood, looking for factual, precise information.” [B.S., 24 years, male].

Other respondents specifically addressed the problem of permission marketing: “Asking for your permission to send you messages just does not work ..., not in the way they use it. You agree for a type of message and you’re suddenly flooded by useless information sent anywhere, anytime.” [D.J., 25 years, male]. The solution proposed was a customer-controlled system: “It would be ideal to have an application that gives you the possibility to ask for specific messages: you are hungry, you ask for restaurant offers and adverts, you want to see a movie, you get promotional coupons from the nearby cinemas. But it should be ultimately controlled by consumers ...” [M.V., 31 years, male].

The content of commercial mobile communication

The respondents identified three main content categories:

- Customer-centered messages: represents advertising that is highly personalized. To receive this kind of content, customers should usually develop a long-term relationship with a specific brand or company – their repeated interaction provides a wealth of information that can be intelligently used by the firm to customize the offers and the advertising messages.
- Product/service-centered messages: are the classical advertising messages that present more or less directly the characteristics and benefits of a specific product or service. The efficiency of these messages is better when the company is able to segment the market and target potentially interested consumers.
- Location-centered messages: are connected with a specific commercial location visited by the consumer. The use of these messages is made possible by the capacity of modern mobile technology to track the location of the mobile phone user, although this capability can raise personal privacy issues (Xu and Teo 2004). Another commercial application of location-track technologies is Bluetooth marketing (Haase and Martin 2008).

However, the participants indicated that an ideal mobile advertising message should include a combination of these three types of content: “Mobile advertising has the potential to combine customer, product and location-based content for the first time in advertising history. This is because mobile phones are highly personal devices and permit location tracking. If companies can identify the right product, for the right customer at the right location – they really hit the target.” [J.-C.B., 27 years, male]. Other respondents were more skeptical about this possibility: “You should also introduce in the equation the customer attitude or mood ... If I am near a restaurant at lunch time, it does not necessarily mean that I am hungry, so if I receive an advert from that restaurant it can really annoy me.” [F.J., 38 years, female].

Many people considered an increase of customer control and interactivity as a possible solution to enhance the effectiveness of mobile advertising: “Let’s say that I am looking for a travel agency ... If I could just open my mobile phone, touch a key and say ‘travel agency, holiday’, and then some sort of intelligent agents recognizes my voice, identifies my location, and sends me on my mobile phone screen a map or a list of the closest travel agencies, with specific promotional offers – this is what I would call a good commercial communication.” [P.M., 28 years, male].

V. Conclusions

This study attempted to investigate the mobile phone users’ perceptions regarding the existing practices of wireless advertising. Its importance stems from the danger of taking for granted the traditional forms of advertising and applying them automatically to new media channels, without any functional or content adaptations. The negative effects of this superficial application of advertising principles was repeatedly emphasized by the respondents: “You have the impression that very few people really think about how to communicate with you. They think that sending a

commercial offer to anybody is called marketing, but for me this is just a waste of time and money” [L.D. 35 years, female].

The findings demonstrate the necessity of a qualitative approach in investigating mobile communication principles and application. Although previous studies have identified important variables that determine the attitude of mobile phone users’ towards wireless advertising, there is still a lack of understanding of the specific needs and reactions of consumers to mobile commercial messages in real-life situations. The participants demonstrated an active attitude regarding mobile advertising, which they think it has the potential to revolutionize the practice of commercial communication, by focusing more on consumer’s personal needs and circumstances. However, this cannot be realized without increasing the interactive control of mobile phone users’ over the functionality and content advertising messages. Although the required technology already exists, it seems necessary to create new applications that can combine the advantages of customer-, product- and location- centered communication.

This study has a number of limitations determined by the choice and application of a specific research methodology. The findings are purely qualitative in nature, and the number of participants to the focus groups was relatively small to permit a valid generalization of findings, at national or international level. Future studies should attempt to develop this qualitative investigation and define the bases for a value co-creation strategy in which consumers are directly involved in the process of mobile communication development and application.

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THE IMAGE OF INVESTMENT AND FINANCIAL SERVICES COMPANIES IN WWW LANDSCAPE (WORLD WIDE WEB)

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In a world where the internet and its image are becoming more and more important, this study is about the importance of Investment and Financial Services Companies web sites. Market competition, creates the need of studies, focused on assessing and analyzing the websites of companies who are active in this sector.

Our study wants to respond at several questions related to Romanian Investment and Financial Services Companies web sites through four dimensions: content, layout, handling and interactivity. Which web sites are best and from what point of view? Where should financial services companies direct their investments to differentiate themselves and their sites? In fact we want to rank the 58 Investment and Financial Services Companies web sites based on 127 criteria.

There are numerous methods for evaluating web pages. The evaluation methods are similar from the structural point of view and the most popular are: Serqual, Sitequal, Webqual / Equal EtailQ, Ewam, e-Serqual, WebQEM (Badulescu, 2008:58).

In the paper: "Assessment of Romanian Banks E-Image: A Marketing Perspective" (Catana, Catana and Constantinescu, 2006: 4) the authors point out that there are at least four complex variables: accessibility, functionality, performance and usability. Each of these can be decomposed into simple ones. We used the same method, and we examined from the utility point of view, 58 web sites of Investment and Financial Services Companies based on 127 criteria following a procedure developed by Institut fur ProfNet Internet Marketing, Munster (Germany). The data collection period was 1-30 September 2010.

The results show that there are very large differences between corporate sites; their creators are concentrating on the information required by law and aesthetics, neglecting other aspects as communication and online service.

In the future we want to extend this study at international level, by applying the same methods of research in 5 countries from European Union: Germany, France, Britain, Italy and Spain.

Keywords: Financial Companies websites, Content, Layout, Handling and Interactivity of Websites.

JEL classification: G29

Introduction

Increasing use of Internet in Romania from 23.9% in 2007 to 35.5% in 2010 according to Internet World Stats, and market competition between Intermediaries of Investments and Financial Companies, creates the need of studies focused on assessing and analyzing the websites of companies which are active in this sector. Due to the relatively low cost and power of information and communication technologies, companies are using web pages to improve their image or to gain competitive advantages (Bonson and Escobar, 2002:2).

We emphasize that the Companies of Investments and Financial Services and investors are both winners in this competition between intermediaries. The investors have become more demanding, knowing what can be provided to them, have higher expectations and want personalized service (Maver, 2002: 5)

We study four dimensions of every web page: content, interactivity, handling and layout. Everyone has received a number of points so that a page full score is 91.5. The most important part of the test was content with 33.5 points, the rest scoring: 18 points for interactivity, 17 points for handling and 23 points for layout.

The paper will be a chapter of the dissertation: "MARKETING IN THE FINANCIAL SERVICES AND INVESTMENT COMPANIES. An empirical study". In the future we want an expansion of the international study, by applying the same methods of research. Finally, we will make a comparison between web pages from at least five other EU countries (Germany, France, Britain, Italy and Spain).

Methods for evaluating Web pages

In the literature there are numerous methods for evaluating web pages. As examples we mention the paper "Assessment of Romanian Banks E-Image: A Marketing Perspective" (Catana, Catana and Constantinescu, 2006: 4) in which the authors point out that there are at least four complex variables: *accessibility, functionality, performance and usability*. Each of these can be decomposed into simple ones. However there are differences from author to author.

In the book "Evaluation methods of on-line quality services" (Badulescu, 2008:58) the author discusses methods of assessing and measuring quality of the sites which are divided into two major categories: *methods developed from a behavioral perspective and methods developed from an attitudinal perspective*. The same paper says that the evaluation methods are similar from the structural point of view and the most popular are: Servqual, Sitequal, Webqual / Equal EtaiQ, Ewam, e-Servqual, WebQEM (Badulescu, 2008:58).

Enrique Bonson, Tomas Escobar and Virginia Cortijo - Gallego (Bonson, Escobar and Gallego, 2008: 33) describe how to measure the quality of a website from three points of view: *content* – where the amount of information the user finds is analyzed, *presentation* - the way the site appears and *browsing* – the ease the information is accessed.

To make transactions online, the Intermediaries must prove the existence of three components: *strategic flexibility, the ability to be reliable and information technology* (Saini and Johnson, 2005:360). Companies in this field face a tough competition when it comes to service delivery, and therefore they must learn to combine the complex, customized, dynamic stock market data (Poepsel, 2010). Trading online is extremely important in Companies of Investments and Financial Services and must be approached as an integral part of it. From the collected data we observe that 26 companies are able to trade online, but a quarter of trades on the Bucharest Stock Exchange are online (ZF, 2010)

Molich and Nielsen (Molich and Nielsen, 1990:249) describe four ways to evaluate a web page: *formally* - with specific techniques, automatically by a computerized procedure, *empirically* and *heuristically*. Further, the authors developed a list of principles, called heuristic principles: the dialog must be simple and natural, the language must be usual, a site must be consistent, must provide answers and feedback, have clearly marked exits, shortcuts and good error messages. The main benefit of this method of assessment would be that it is cheap, intuitive and requires no advance planning. Specifically, on evaluation of Investment Financial Services Companies web pages, we find few references. A notable one would be the article of Matthew Poepsel (Poepsel, 2010) which describes the challenges that such a company would have to overcome in order to optimize the performance of web pages. The author describes three challenges: **greater web complexity, unrelenting customer expectations and expanding diversity in customer access.**

Research methodology and data collection

This study attempts to examine from the utility point of view, Investments and Financial Services Companies web sites, following a procedure developed by Institut fur ProfNet Internet Marketing, Munster (Germany).

In Romania there are 58 Companies of Investments and Financial Services according to Bucharest Stock Exchange. All, with the exception of seven, have websites, and each web page was analyzed according to 125 criteria.

The four dimensions of the test: content, interactivity, handling and layout have been awarded points so that a page is full scoring 91.5 points. The most important part of the test was content with 33.5 points, and the rest: 18 points for interactivity, 17 points for handling and 23 points for layout.

The dates were collected by two evaluators in September 2010. The names of all Companies of Investments and Financial Services were acquired from the official website of BSE.

It is important to note that there are at least two companies (BT Capital Securities and Target Capital) which provide much more information, but only once the user passes the login. Some of the most important criteria are found in Table 1.

Table 1. Criteria of evaluating websites

Content	Interactivity	Handling	Layout
Slogan	Contact - E-Mail- Browser window	Top search engine position	Use of Graphics
Privacy Statement	Contact - E-Mail Form	Company Domain	Use of Image Map
Address	Online Activities	Search - Index	Use of Live stream
History	Market Research	Using of https	Use of Text
Business hours	Online tour	Navigation path	Use of Video
List of Phone Numbers	Chat	Jump to the Homepage	Textual Layout
Names of CEO, Board.	Forum	Jump Backward	Aesthetic Layout
Job Offers	Guestbook	Pages "not found/ under construction"	Use of Audio
Glossary	Call-Back-Service	Help Function	Use of Photos
Press Releases	SMS-Letter	Way Description - Branches	Use of 3D-animation
FAQ	Send it to a friend		
Exchange rates	Quality of Interactivity		

Results and discussions

The criteria on which all companies had the maximum score is "Top search engine position". This notes whether the company site appears on the first page of the national search engine motor (e.g.: Google.ro). Another observation is that all companies had high scores to the information required by law through Regulation 3 from 2002 from official site of National Securities Commission regarding advertising: - Addresses of the registered office and secondary offices (96.08% of companies with web sites)

- Identification attributes such as telephone, fax or e-mail (96.08% of companies with web sites)
- The names of Board and Executive Manager Members (92.20% of companies with Web sites),
- Name of shareholders (92.20% of companies with Web sites)
- Description of services (96.08% of companies with Web sites)

- At least the last annual balance (74.50% of companies with Web sites).

Looking at the data collected we can make a top of the most complex web pages. The first place is taken by Intercapital Invest with 58 point from 91.5 possible, followed by KD Capital Management, KBC Securities Romania SSIF (both 51 points), Estinvest and Tradeville (50 points).

Content

Websites cannot - and neither would it be wise to - include all possible content of attributes. Each company must select only the major components (Debreceeny, Gray and Mock, 2001:4).

However, the websites of Financial Intermediaries in Romania have many of the assessments, scored with 0 points. For example, none of the companies surveyed have a “children’s corner”, a page with answers to press or cannot save “screensavers” or images.

Many web sites of American financial companies like Broadway Federal Bank or Florence State Bank have “kid’s corner” with the aim of teaching financial responsibility from earliest ages.

Few points are accumulated on criteria as: photographs of the company, working hours, photos of the Board members, interactive games and campaigns waged by the Company.

Websites from this field must provide complete information so investors can make decisions in their interests (Singer and Cacia, 2009:11).

Top of the best websites in terms of content are: SSIF Broker and KD Capital Management (26 points), Intercapital Invest (24 points) Target Capital and KBC Securities Romania SSIF (23 points from 33.5 points possible).

Handling

In terms of handling, things are better. Out of 51 companies that have web pages, the author could open without problems 48. There are small problems here too: many companies do not have thumbnails or a previous page button.

The winners in handling field are: Fairwind Securities, IFB Invest and Tradeville with 13 points each, Alpha Finance Romania, KBC Securities Romania SSIF and KD Capital Management with 12 points each (23 being the higher score for this feature).

Interactivity

We discover that interactivity is the most neglected by the creators of Investments and Financial Services Companies web sites. There are nine criteria out of a total of 24 (e.g. callback service, e-card, chat, forum, guest book, available online company brochure) that didn’t obtain any points in the analysis of assessors. This proves the lack of interest in creating a link with investors.

Some readers may be interested in how the company is engaged in social activities or how working in such a company is like. The fact that there are no Financial and Investment Services Companies able to offer callback service or financial news via SMS makes them seem obsolete.

There is more than one study which demonstrates their usefulness (Balasubraman, Peterson and Jarvenpaa, 2002:350). The Investments and Financial Services Companies, which were the best at interactivity, are: Intercapital Invest (8 points), Raiffeisen Capital & Investment, Estinvest, Tradeville (6 points, 18 being the higher score)

Layout

Unfortunately, layout is not very well represented in the companies' websites. Criteria like the text version of pages, live broadcast cameras, or use of Web phone are completely neglected.

Indeed, we can argue that excessive use of graphics can have the adversely result. An undesirable aspect of a web page full with images may cause disorientation because the user may be lost in a forest of links and images.

The best web sites in terms of layout scored 14 points, 23 being the higher score. Forward we can make a top: Romcapital and Intercapital Invest (14 points), Interfinbrok Corporation, Interdealer Capital Invest, IFB Finwest, Alpha Finance Romania and Estinvest (13 points)

Conclusions

This paper has followed the classification of the 58 Companies Financial Services and Investment in four ways: content, navigability, layout and interaction, using a procedure developed by Institut fuer ProfNet Internet Marketing, Munster (Germany).

Conclusions are not encouraging. The company that is on the first place, in terms of complexity is Intercapital Invest with a score of 58 points, from 91.5 possible.

One way to be truly competitive and to attract investors, both Romanian and foreign, Financial and Investment Services Companies should improve their web pages in terms of content and interactivity.

Future research

A future research could show the position of Romanian web sites compared to those from Germany, France, Great Britain, Spain and Italy. The final study could show the weaknesses and strengths of companies in Romania.

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PRODUCT PORTFOLIO ANALYSIS - ARTHUR D. LITTLE MATRIX

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In recent decades we have witnessed an unseen dynamism among companies, which is explained by their desire to engage in more activities that provide a high level of development and diversification. Thus, as companies are diversifying more and more, their managers confront a number of challenges arising from the management of resources for the product portfolio and the low level of resources with which companies can identify, at a time. Responding to these challenges, over time were developed a series of analytical product portfolio methods through which managers can balance the sources of cash flows from the multiple products and also can identify the place and role of products, in strategic terms, within the product portfolio. In order to identify these methods the authors of the present paper have conducted a desk research in order to analyze the strategic marketing and management literature of the last 2 decades. Widely were studied a series of methods that are presented in the marketing and management literature as the main instruments used within the product portfolio strategic planning process. Among these methods we focused on the Arthur D. Little matrix. Thus the present paper has the purpose to outline the characteristics and strategic implications of the ADL matrix within a company's product portfolio. After conducting this analysis we have found that restricting the product portfolio analysis to the A.D.L. matrix is not a very wise decision. The A.D.L. matrix among with other marketing tools of product portfolio analysis have some advantages and disadvantages and is trying to provide, at a time, a specific diagnosis of a company's product portfolio. Therefore, the recommendation for the Romanian managers consists in a combined use of a wide range of tools and techniques for product portfolio analysis. This leads to a better understanding of the whole mix of product markets, included in portfolio analysis, the strategic position held by each product within a market, the performance potential of product portfolio and the financial aspects related to the resource allocation process for the products within the portfolio. It should also be noted that the tools and techniques specific to product portfolio analysis do not give accurate answers, despite the appearances created by the analysis stage, where the products are plotted rigorously. However, their main virtue is simplicity, as these highlight the managers' need for further investigations.

Keywords: product portfolio, ADL matrix, life cycle, competitive position, strategic analysis

JEL classification: M31

Introduction

A fundamental question that managers must answer each time is: In what direction must the company go? The strategy implemented by a company must be elaborated so that it considers all market opportunities and neutralizes current threats or foreseen threats. At the same time the company must value its strong points, by referring to the competition (Căescu 2011:98). On the basis of these features specific to an ideal strategy and by considering current options that companies may resort to, one may assert that the salient features of the strategy selection process are its difficulty and complexity. Over time, a series of methods have been created with a view to support the strategy assessment and selection process. Of these, the methods corresponding to product portfolio analysis stands out.

Product portfolio analysis is an analytical approach, whereby a company manager can view the company as a sum of products that must be managed in a profitable manner. However, taking into account the specific characteristics of the marketplace, the competitive advantage and the resource allocation process, it can be pointed out the fact that the product portfolio analysis gives the manager an opportunity to address his company from a different perspective and to provide in the future, more attention to all actions to be undertaken. This product portfolio analysis must become routine activity undertaken by the company, through its carrying out on a regular basis, so that decisions of earmarking of financial resources may be monitored, updated and modified with a view to accomplishing corporate objectives, correlated to the process of generation thereof carried out in an efficient way by each product (Armstrong and Brodie 1994:2).

The basic decisions, that involve the earmarking of corporate resources together with the general approach, by means of which a product will be managed, does not complete the strategic analysis process and the selection of the viable strategic alternative. Consequently, for each product must be examined and selected a certain type of strategy that in the end should lead to the meeting of long-term strategic objectives (Wensley 1994:86).

Within the list of significant contributions to the product portfolio analysis domain, must be disclosed the one made by Arthur D. Little consulting company. This consulting company was founded in 1886 by Arthur D. Little, a 23 year old student from Massachusetts Institute of Technology (MIT), who was trying to help paper factories from New England in order to find new chemicals substances for the paper processing. One of his first major consultancy projects was the establishment of an advisory research and development department within the General Motors Company. By the early '70s, MIT was the main shareholder. Then Arthur D. Little has quickly become a public company before being bought by its own employees. The Arthur D. Little consulting company, which has research facilities in Cambridge – USA and in Cambridge - UK, has acquired in the market, some prestige in the '70s by developing a strategic analysis model. Thus the ADL consultants wanted to improve the analytical product portfolio models, by taking into consideration the analysis of product life cycle and a more analytical approach of competitive position.

This model of strategic analysis of the product portfolio is called ADL (abbreviation for Arthur D. Little) and is structured like a matrix with five rows and four columns (5 x 4) resulting from combining two performance indicators: industry life-cycle stage and market competitive position (Florescu and Mălcomete and Pop 2003:473).

With reference to the specific market characteristics, the present method, which considers the life cycle stage of a product, points out that a market, in a certain period of time, may be in one of the following four stages: introduction, growth, maturity and decline. Each specific stage within the product life cycle can be identified, assessed, quantified and characterized by a system of indicators.

The performance indicator represented by market competitive position is valued by reference to competition, using qualitative and quantitative variables, which make up a set of determinants factors of success.

Thus, in comparison with other methods of analyzing the product portfolio, Arthur D. Little model focuses on factors that must be taken into account in order to assess the competitive position held by a company that operates in a given market. The following list is not exhaustive and may be supplemented with other factors (Florescu and Mălcomete and Pop 2003:474):

- **supply factors:** long-term contracts, labor costs and payment terms;
- **production factors:** production flexibility and capacity, experience, technical skills, environmental protection, quality of management, skill or expertise, labor productivity and production cost;

- **commercialization factors:** the power and quality of distribution network, credit conditions, the image of the product, product range, market share, sales force and price;

- **financial factors:** profitability, financial stability, cash flow and technological protection;

Further, based on these factors and using a method of weighting and scoring, competitive position can record several states, according to company forces in relation to competitors on a given market. (Popa 2004:155). In other words Arthur D. Little matrix argues that as these factors change over time, the products gain or lose ground in terms of competitive advantage, and eventually they will identify with one of the following five potential competitive positions:

- **Dominant** - this position is very rare and most often is due to the posture of a monopoly company or market dominance exerted strong, from a technological point of view. The implications of this position mean that the company is able to influence the behavior of other organizations and has a wide range of strategic options.

- **Strong** - the company has a high level of freedom in terms of strategic options and can act without its market position to be threatened by competitors.

- **Favorable** - this position is found in fragmented markets, where no competitor has a very clear market position and the most important companies have a high degree of freedom. The companies with a favorable market position often possess strengths that can be exploited through specific strategies and are facing opportunities that may generate market share growth.

- **Tenable** - companies within this category are generally vulnerable to fierce competition exerted by organizations with proactive and strong market positions. However, they survive and are able to justify their existence on the market. Also in this category are limited opportunities for an organization that wants to strengthen its market position. Thus, the profitability for a company with a good position is best achieved and supported through specialization.

- **Poor** - the company performance is generally unsatisfactory, even if market opportunities exist, through which it can be improved. However, often, the company is too big and inefficient in terms of competitiveness or is either too small to cope with competitive pressure. As such, if a company sees no action to change the future is likely to be removed from the market or even to voluntarily leave the market.

In the marketing literature some authors consider that the list, which identifies and characterizes the competitive positions of a specific product, it may also be considered a sixth position, which is suggestively called "**Unsustainable**" or "**Very Poor**". A product is located in this position when performance is unsatisfactory and there are very few market opportunities that can improve the situation. In conclusion, in an unfavorable conjuncture it is recommended an immediate withdrawal from the market, with less expensive costs.

Another basic attribute that made the ADL model to assert in strategic consulting and distinguish itself from all other methods of evaluation of the product portfolio is that it establishes a close relationship between the company's competitive position and profitability levels, within different phases of the product life cycle, on a given market.

Thus it can be said that the profitability raises and the risk of change of competitive position diminishes as it tends to a dominant position and financial needs and risk of unplanned changes decline as it records an evolution within the market life cycle. **Table nr.1** summarizes the profitability, the risk and the financial needs of products according to the competitive position and market life cycle stage.

Strategic implications

Following the establishment of product position within the Arthur D. Little matrix, we can move to the next phase of identification and selection of strategic steps.

At corporate level, the resources are normally allocated to products, based on the degree of their competitiveness.

Thus products are classified based on criteria such as: desirability of reaching the maturity stage, strength of competitive position, ability to generate positive cash flows on long term and short-term, the level of risk and the return on investment. This classification provides to higher-level management the skills to decide which products from the product portfolio will receive financial resources and which will not.

Table nr. 1 – The profitability, the risk and the needs of financial flux depending on the competitive position and industry life cycle stage

Market life cycle stage	Introduction	Growth	Maturity	Decline
Competitive position				
Dominant	<ul style="list-style-type: none"> • Good profitability • Cash flow = 0 • High investments 		<ul style="list-style-type: none"> • Good profitability • Cash flow = + + • Low investments 	
Strong	<ul style="list-style-type: none"> • Medium risk • High investments 		<ul style="list-style-type: none"> • Low risk • Low investments 	
Favorable	<ul style="list-style-type: none"> • High cash flow needs • Medium profitability 		<ul style="list-style-type: none"> • Low cash flow needs • Medium profitability 	
Tenable	<ul style="list-style-type: none"> • Cash flow = - - - • High risk • Low profitability 		<ul style="list-style-type: none"> • Cash flow = 0 • Medium risk • Low profitability 	
Weak	<ul style="list-style-type: none"> • Low profitability 		<ul style="list-style-type: none"> • Low profitability 	

Source: Bărbulescu, Constantin. “Sistemele Strategice ale Întreprinderii”, București: Editura Economică, 1999, p.140.

As such, the combination of the two performance indicators of the present matrix, represented by the competitive position and industry life cycle stage, contribute on the one hand to the diagnosis of products included in the product portfolio and on the other hand to the identification and evaluation of strategic options. **Table nr.2** shows the specific strategic options corresponding to the 20 quadrants of the ADL matrix. The ADL matrix speculate the idea that when it comes to choosing and implementing a strategy, a company will select, in most cases, one or more options from the following list, which presents a set of general strategies (Wind and Mahajan and Swire 1983:59):

- investing in order to maintain or even improve their competitive position in the marketplace;
- spending in order to maintain the status quo;
- harvesting;
- exiting the market;

However, the ADL consulting company highlights a number of guiding principles that should be considered in the selection of strategic options, of which the most important points out that the selection of a strategy should be based on actual situation of products and not on the facts and the subjectivity of managers. Thus the ADL matrix advocates realism in the strategic planning process. In conclusion we can say that the ADL matrix facilitates the choosing of a marketing strategy, but it is insufficient to define a global strategy (Florescu și Mălcomete și Pop 2003:474).

The advantages and disadvantages of the ADL matrix

Unlike other models of product portfolio analysis the ADL matrix is based on an enhanced applicability because it fits to all situations of competition encountered in a marketplace.

Also the ADL matrix can be applied to the fragmented industries, holding a small competitive advantage but with a large number of ways of obtaining it (provides multiple ways of differentiation). As such we can say that the ADL matrix has a high degree of adaptability to situations of a qualitative nature.

A first disadvantage is that the matrix does not take into account a number of phenomena that can generate long-term involution in the products life cycle of a company. Another weakness is related to the high level of difficulty in terms of objective evaluation of the ADL model variables. This is often the case for the competitive position indicator. In other words, the difficulty lies in the fact that some factors are qualitative in nature and there is a high risk of bias in their use.

In conclusion, we can say that the ADL matrix provides clearer results as a company is more diversified and enable synchronization on decisions relating to competition.

Table nr.2 - A.D.L. Matrix Strategies

		INDUSTRY LIFE CYCLE STAGE			
		INTRODUCTION	GROWTH	MATURITY	DECLINE
COMPETITIVE POSITION	DOMINANT	- Rapid development - Act offensive	- Rapid development - Defend position - Act offensive - Cost leadership	- Defend position - Act offensive	- Defend position - Focus - Consider retreat
	STRONG	- Rapid development - Differentiation	- Cut costs - Differentiation - Attack small competitors	- Cut costs - Differentiation - Focus	- Harvest
	FAVORABLE	- Rapid development - Differentiation	- Cut costs - Differentiation - Attack small competitors	- Focus - Differentiation - Attack small competitors	- Harvest
	TENABLE	- Market development - Focus	- Maintain or retreat - Identify a niche - Aim growth	- Maintain or retreat - Identify a niche	- Retreat
	WEAK	- Identify a niche - Follow the competitors	- Identify a niche - Retreat	- Retreat	- Retreat

Source: Wilson, Richard M.S and Gilligan, Colin. “*Strategic Marketing Management – Planning, Implementation and Control*”, 3rd Edition, Elsevier Butterworth-Heinemann, 2005, p. 378

Conclusions

The product portfolio strategic planning offers three potential benefits for a company. The first is that it encourages the promotion of competitive analysis among the products, through comparative assessments, resulting in a number of sustainable strategies.

The second benefit claims selective allocation of financial resources by identifying issues of a strategic nature and by adopting a standardized and unbiased process of negotiating. Thus, the mix of forces within the company will be better focused.

The third benefit derives from the experts' points of view who argue that this way of approaching the product portfolio, which focuses on a number of tools and techniques, helps the company to reduce risk, to increase the concentration and also the involvement, regarding the identification and implementation of the strategies.

Correlated with visual approach, which is based on a series of graphics, the company's product portfolio analysis is strengthened by the comparative analysis process of the market shares, market growth rates, market attractiveness, competitive position and the market life cycle, specific to each product.

According to the information mentioned above, it must be highlighted that limiting the product portfolio analysis to the A.D.L. matrix is not a very wise decision. The A.D.L. matrix with other marketing tools of product portfolio analysis has some advantages and disadvantages and is trying to provide, at a time, a specific diagnosis of a company product portfolio.

The tools and techniques of product portfolio analysis facilitate discussion and shape the competitive position of a company, generating at the same time questions related to the contribution of the current allocation of resources to the success and long-term vitality. Since resources are limited, the managers must carefully manage these strategic decisions in terms of effort invested in each market and the expected profit level for each case (Căescu 2011:101). However, besides the fact that these tools and techniques help managers to control the allocation of resources and to suggest realistic goals for each product, they also offer the possibility of using the products, as vital resources within the process of fulfilling the objectives established at corporate level. Therefore, the recommendation for the Romanian managers consists in a combined use of a wide range of tools and techniques for product portfolio analysis. This leads to a better understanding of: the whole mix of product markets, included in portfolio analysis, the strategic position held by each product within a market, the performance potential of product portfolio and the financial aspects related to the resources allocation process for the products within the portfolio. It should also be noted that the tools and techniques specific to product portfolio analysis do not give accurate answers, despite the appearances created by the analysis stage, where the products are plotted rigorously. However, their main virtue is simplicity, as these highlight the managers' need for further investigations.

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CONSUMER BEHAVIOR ON THE FRUITS AND VEGETABLES MARKET

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In the past years the intensification of competition has changed the way in which companies communicate with their customers. The main challenge doesn't represent anymore to create good products but also to be able to sell them. The best marketing strategy of a company can be best developed if the needs and the behavior of the consumer are known. In this paper there are analyzed the results of a research about the behavior of consumer towards fruits and vegetables. The research was done in the period December 2010 – February 2011 on 146 respondents regarding the buying behavior of consumers at retailers. The focus in the research is put on the cognitive and emotional reactions consumers have when they make the buying decision and consisted out of an observation and a survey. In this article there are presented both aspects regarding the observed behavior towards fruits and vegetables and the motives which led to this behavior. Depending on these results, there are presented the implications of this behavior on the marketing strategy of a company.

Key Words: consumer behavior, emotional and cognitive reactions, fruits and vegetables market

1. Introduction

Because of the intensification of competition on markets, one of the biggest challenges of companies nowadays is to convince the consumers to buy their products. Especially on a market such as the fruits and vegetables market with easy perishable products a company should know what type of instruments it should apply in order to convince the consumer to buy the products in the right time, before their natural deterioration. For this reason it is important to analyze the behavior of the consumers and their motives to buy these products, in order to be able to influence their decision and implement efficient marketing instruments.

In this article there are presented the results of a research regarding the behavior of consumers towards fruits and vegetables. There is analyzed the type of behavior the consumers have towards fruits and vegetables as for instance a habitualized behavior, analytical behavior or an impulsive behavior. Besides this there are analyzed the motives which the consumer has in order to buy the products and the elements which influence the buying decision.

2. The particularities of the fruits and vegetables market

The market for fruits and vegetables is a market with many particularities because of the fact that the products are easy perishable and because they represent an important nutritional component for the consumers. Because of these aspects, the market for fruits and vegetables has a lot of challenges from its production process until the distribution to the final consumers.

The challenge in the production process of the fruits and vegetables represents the quality of the products. According to Boboc, there are two aspects of quality. On one hand the quality of fruits and vegetables regarding their content, especially the elimination of undesired substances such as chemicals, bacteria and other substances used during the production process (Boboc, pg. 4). Another aspect which should be taken in consideration is the pollution from the external environment such as the soil, air or even rain which is difficult to influence. On the other hand,

from the point of view of the consumer, the quality of the product represents the subjective opinion on taste or even on aspect. In order to assure the quality of the agri-food products, there have been developed a series of reglementations both at the level of the European Union and on a national level. All these reglementations should assure the safety and the quality of fruits and vegetables and they should be taken in consideration by the companies which work in this field. From a point of view of the logistics of a company or a farmer for fruits and vegetables, the big challenge represents to bring the easy perishable products in the right time to the consumer, without damaging the quality of the products. On one hand these companies have to have well developed logistics systems in order to assure the transportation of the products in good conditions. On the other hand they have to assure the adequate storage conditions in order to keep the quality of the products, because of the fact that the quality of fruits and vegetables, as for any other natural product, deteriorates in time. The last provocation of the companies is to convince the customers to buy and consume the products in the right time before their natural deterioration. For this reason they have to develop a good sales plan and to find the right marketing instruments in order to convince the consumers to buy the products.

3. The behavior of the Romanian consumers regarding fruits and vegetables

In order to determine the behavior of the consumer regarding fruits and vegetables, an experiment was done. The objective of the experiment was to analyze and explore the cognitive and emotional reactions in the buying behavior and to determine their rationality from the point of view of the consumer. It consisted out of three parts. The initial part questioned the respondents on their initial purpose and desires of the buying process such as the products he wanted to buy, the amount of money, he wanted to spend and so on. The second part consisted out of an observation regarding the buying behavior. There were analyzed the reactions in the buying process for several product groups. The third part included a survey, which should explain the aspects observed in the previous part, regarding the motives of buying the products. In this article there are presented only the results regarding the cognitive and emotional reactions towards fruits and vegetables.

The marketing-experiment was conducted in the period December 2010 – February 2011 in different retail formats in the main cities of Romania. There were observed 146 persons, which were chosen randomly by the interviewer. The only aspect which was considered in the marketing-experiment was that the number of female respondents should be equal to the number of male respondents. This condition was put, because previous researches and studies have shown that the buying behavior of women and men differs.

In this article there are presented the results of the research which analyze the behavior of the consumer regarding fruits and vegetables. There are presented both the results of the observation regarding the buying decision of the consumer in the case of fruits and vegetables and the motives which the consumer have in order to buy this type of products. In this article there are analyzed both results, because the observation shows an external point of view regarding the behavior of the consumer, while the results of the survey show the motives which the consumer have in order to buy the products. In fig. 1 there can be observed the results of the observation regarding the behavior of the consumer regarding fruits and vegetables.

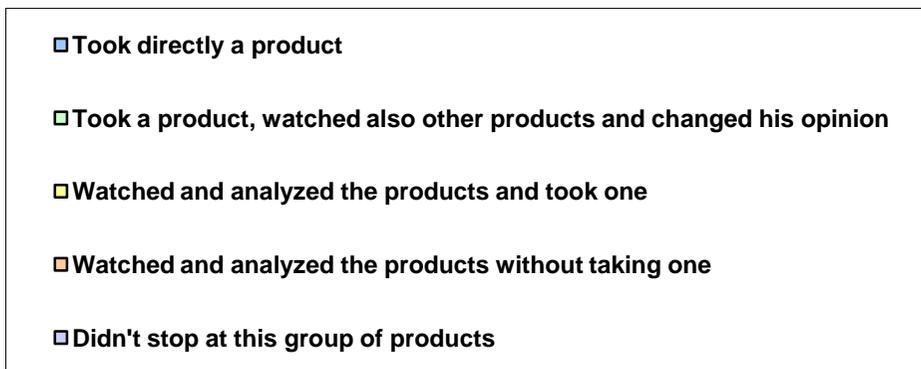
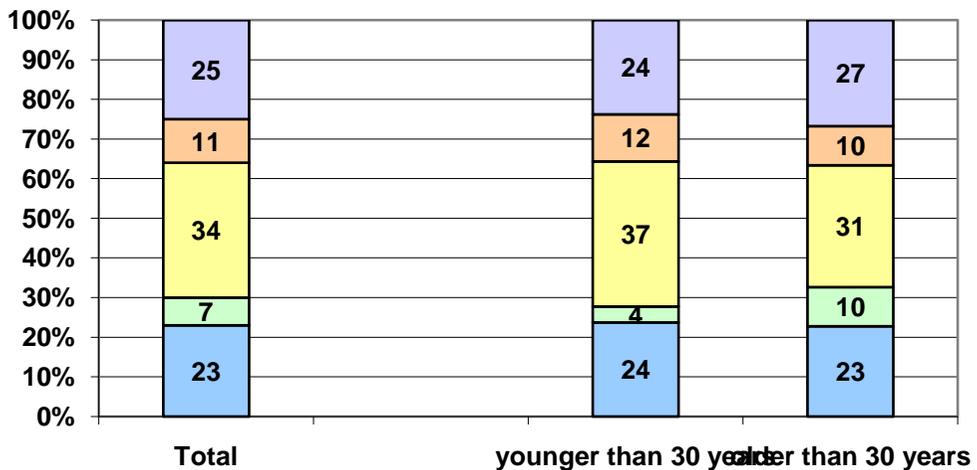
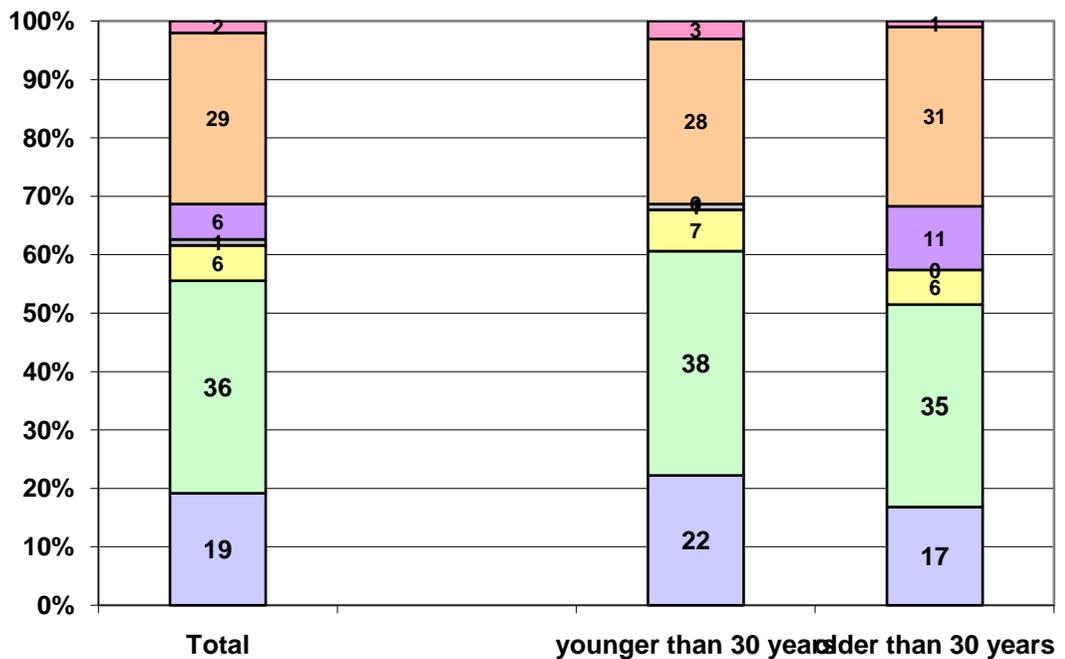


Fig. 1. Results of the observation regarding the buying behavior of fruits and vegetables

As it can be observed in fig. 1, 25% of the respondents didn't stop at this group of products. This percentage is higher for the respondents older than 30 years (27%) than for the people younger than 30 years (24%). 11% of the respondents has analyzed the group of products of fruits and vegetables but didn't buy any. This percentage is higher for the people younger than 30 years than the people older than 30 years. This can be explained by the fact that this group of respondents had the intention to buy the products but it wasn't convinced by the products. 34% of the respondents analyze the products before they buy it. The percentage for this type of behavior is higher for the younger people (37%) than for the older people (31%). 7% of the respondents are not very decided on the products they have bought. This group of respondents has changed their decision during the buying process. This percentage is higher for the elder people (10%), which shows a higher degree of undecided people. 23% of the respondents have a habitualized buying behavior regarding fruits and vegetables. They take directly the products they need, without analyzing too much. In this case there is no much difference between people of different ages.

The results of the observation show that most of the people analyze the fruits and vegetables during the buying process. More than 50% of the respondents analyze the products while buying them. For this reason, in order to sell this type of products, it is important that the products should have a good and appealing aspect. Even though the behavior of the consumer differs, most of the consumers analyze the products while buying them.

In fig. 2. there are analyzed the motives which support the buying behavior observed in fig. 1.



- I always buy the same products because I know they are good
- I analyze every time I go to a store which is the best option
- I always buy the product with the lowest price
- I look for those products which I saw in an advertising or which were recommended by friends and if I don't find them I buy something else
- I buy those products for which there are special offers
- I watch on the shelves and I buy the products I like best
- Even though I didn't intend to buy a product, but I like it, I buy it

Fig. 2. The buying motives of consumers regarding fruits and vegetables

As it can be observed in fig. 2, 19% of the respondents have a habitualized buying behavior regarding fruits and vegetables. They buy most of the time the same products without analyzing too much the products. This percentage is higher for the younger people (22%) than the older people (17%). The fact that people analyze the fruits and vegetables they buy, is also confirmed by their statements. 36% of the respondents say that they analyze the best option every time they have to make a buying decision. This percentage is higher for younger people (38%) than for older people (35%). 6% of the respondents base their buying decision regarding fruits and vegetables on the price. So the analysis is not based on the best products, but on the lowest price. This characteristics is valid both for younger and older people.

The results of the experiment show that the population is not very much influenced by advertising campaigns or friends in their buying decision regarding fruits and vegetables. This shows that the buying decision is taken in the store. The influence is slightly higher for younger people (1%) than for older people (0%). In comparison to that, people older than 30 years are more influenced by special offers in the store than younger people. So 11% of the older people are influenced by special offers, while almost none of the people younger than 30 years are influenced by special offers for the products group fruits and vegetables.

29% of the respondents state that they buy the fruits and vegetables which they like most. Consequently their buying decision is much influenced by the aspect of the products. This type of decision is an analytical one, but it also contains some emotional subjective aspects like the liking of the product. This percentage is higher for older people (31%) than for younger people (28%). 2% of the respondents have a pure emotional-impulsive behavior by buying the fruits and vegetables they like, although they didn't have this intention at the beginning. This percentage is higher for younger people (3%) than for older people (1%).

As a conclusion it can be stated that most of the consumer make their buying decision regarding fruits and vegetables based on an analysis. The results of the survey shows that the analysis is based both on cognitive and emotional elements. Consequently, some of the consumers make their decision based on cognitive elements as for instance the price or the best option. Other consumers make their decision based on emotional factors as for instance the fruits and vegetables they like best. For this reason the producers and the retailers should adjust their marketing strategy in order to convince the consumers to buy the fruits and vegetables. As it can be observed in the research, the consumers are not very much influenced by advertising or other campaigns in the case of fruits and vegetables. In this case the decision is taken in the store, so both the producers and the retailers of fruits and vegetables should take care of the sales instruments they apply in the store. On one hand the aspect of the fruits and vegetables in the store is very important, because many consumers analyze the products and they take the one that they like best. Taken in consideration the fact that fruits and vegetables are easy perishable products the retailers should concentrate their attention on how to keep the products fresh in a natural way, without damaging the quality of the product. On the other hand retailers and producers should adjust their marketing instruments in the store in order to convince the consumer to buy the products. They can adjust the prices for products which are easy perishable in order to optimize the buying process and even to convince the consumers to buy the products

4. Conclusions

The research regarding the consumer behavior shows that most of the consumers have a rather analytical behavior regarding fruits and vegetables. Most of them analyze the product, although the reasons behind the analysis differ. Some of the decisions are based on cognitive aspects such as the best price or the best alternative, while other are based on emotional elements such as the product which is liked best. Based on this behavior a company can adjust their marketing strategy. The results of the research show that the decision of the consumer regarding fruits and vegetables is taken in the store and not previous to the buying decision. For this reason, the focus of the marketing strategy of a company which sells fruits and vegetables should be on instruments at the point of sale. Only by using the instruments at which a company reacts, can increase the success of that company.

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LE DYNAMISME DES TPE ET PME ET L'ÉVOLUTION DE L'ÉCONOMIE ROUMAINE

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The Entrepreneurship concept has its roots in the mid-1970s, it is getting really important much later in the 1990s (Hernandez, 2010). The entrepreneur is at the heart of regional development as an engine of growth. It concerns the creation of enterprises, but also management, business development and networking. The aim of our research is to characterize the private sector development in Romania since the beginning of the transition to define the role of SMBs in the dynamics of development, identify the current weaknesses of the private sector and propose solutions. For our study, we used several previous studies on the characterization of the Romanian economy since the beginning of the transition. We also used recent data from the Ministry of Economy. We also used the large literature on entrepreneurship and business networks. The characterization of the Romanian economy is obtained by comparison with countries in the area but also some data from highly industrialized countries or countries of the south. Each transition is experiencing its own economic development based on its specific history and choices in terms of economic and social policies. According to our research, the private sector is characterized by an increase in the number of businesses created, but the density of firms per capita is still low compared to other countries in the area. On the other hand, companies are mostly micro (businesses without employees to create their own jobs) or small (less than 9 employees). This demonstrates a real dynamism in business creation. However, the creation of many SMBs may not be an end in itself. Enterprises have to develop in order to face competition and to achieve economies of scale, or they can even join or create their networks.

Key-Word : Micro, small and medium enterprises (MSMEs), transition, clusters

Classification JEL : M20, P20

L'économie de l'entrepreneuriat trouve ses racines dans le milieu des années 1970, mais connaît son essor dans les années 1990. Elle place l'entrepreneur au cœur du développement des territoires comme moteur de la croissance. Elle concerne la création d'entreprises mais aussi le management, le développement des entreprises et les réseaux. L'objectif de notre recherche est de caractériser le développement du secteur privé en Roumanie depuis le début de la transition afin de définir la place des TPE/PME dans la dynamique de développement, de déceler les faiblesses actuelles du secteur privé et de proposer des solutions. Pour notre étude, nous avons utilisé plusieurs travaux antérieurs concernant la caractérisation de la l'économie roumaine depuis le début de la transition. Nous avons aussi utilisé des données récentes provenant du ministère de l'économie. Nous avons également fait appel à la nombreuse littérature concernant l'entrepreneuriat et les réseaux d'entreprises. La caractérisation de l'économie roumaine s'obtient par comparaison avec des pays de la zone mais aussi quelques données provenant de pays très industrialisés ou encore des pays du sud. Chaque pays en transition connaît sa propre évolution économique en fonction de son histoire spécifique et de ses choix en termes de politiques économique et sociale. Selon nos recherches, le secteur privé se caractérise par une augmentation croissante du nombre d'entreprises créées, cependant la densité des entreprises par habitants est encore peu élevée par rapport à d'autres pays de la zone. D'autre part, les entreprises sont pour la

plupart des micros (entreprises sans salariés permettant de créer son propre emploi) ou de petites entreprises (moins de 9 salariés). Ce qui témoigne d'un dynamisme réel dans la création d'entreprise. Cependant, la création de nombreuses TPE/ PME ne peut être une fin en soi. Les entreprises ont vocations à se développer ou à s'associer pour faire face à la concurrence et pour réaliser des économies d'échelle.

Mots-clé : TPE/PME, transition, densité, réseaux

Introduction :

L'objectif de cette article est d'évaluer les forces et les faiblesses du secteur privé roumain. La démarche est la suivante : nous rappellerons dans une première partie les problèmes qui se sont posés pour la Roumanie au début de la période de transition, notamment les types et les causes des retards qui sont apparus par rapport à d'autres pays de la région. Dans une seconde partie, nous traiterons principalement des attentes et des difficultés liées à la privatisation de l'économie roumaine. Puis nous nous attarderons dans une troisième partie sur la structure du secteur privé roumain aujourd'hui. Face aux insuffisances constatées, la constitution de réseaux d'entreprises peut permettre de palier aux insuffisances du secteur privé.

I - Le processus de la transition

Au début de la période de transition la Roumanie a pris un peu de retard dans le processus de libéralisation économique, contrairement à la Hongrie, la Pologne et dans une moindre mesure la Tchécoslovaquie, comme l'indique le tableau suivant :

Tableau 1 : Indices de libéralisation*

	1989	1990	1991	1992	1993	1994	1995	1996	1997	Cumul 89-97	politique de stabilisation
Bulgarie	0,13	0,19	0,62	0,66	0,66	0,64	0,58	0,65	0,79	4,92	01/02/91
Hongrie	0,34	0,57	0,74	0,78	0,82	0,86	0,9	0,9	0,93	6,84	01/03/90
Pologne	0,24	0,68	0,72	0,82	0,82	0,86	0,89	0,89	0,89	6,81	01/01/90
Roumanie	0	0,22	0,36	0,45	0,58	0,68	0,71	0,72	0,75	4,47	01/01/93
Slovaquie	0	0,16	0,79	0,86	0,83	0,83	0,86	0,86	0,86	6,05	01/01/91
Tchéquie	0	0,16	0,79	0,86	0,9	0,90	0,93	0,93	0,93	6,4	01/01/91
Moldavie	0,04	0,04	0,1	0,38	0,51	0,55	0,68	0,75	0,75	3,8	01/09/93

* L'indice de libéralisation compris de 0 à 1 est une moyenne de trois indices séparés : la libéralisation des marchés domestiques (pondération de 0,3) ; la libéralisation du commerce extérieur (0,3) ; la privatisation et la réforme bancaire (0,4). La somme des indices annuels depuis 1989 est un indicateur de l'étendue des réformes.

Source : De Melo Martha, Denizir Cevdet, Gelb Alan, « Patterns of Transition from Plan to Market », The World Bank Economic Review, Vol. 10, n° 3, pp.397-424. In : World Economic Outlook, World Bank, 2000.

Le tableau suivant nous donne une évaluation du niveau actuel de libéralisation pour certaines économies en transition :

Tableau 2 : État de la réforme en 2010

	Private sector share/GDP	Large-scale privatisation	Small-scale privatisation	Price liberalisation	Trade and foreign exchange	Competition policy	Overall infrastructure reform
Bulgaria	75 %	« 4 »	« 4 »	« 4+ »	« 4+ »	« 3 »	« 3 »
Croatia	70 %	« 3+ »	« 4+ »	« 4 »	« 4+ »	« 3 »	« 3 »

	Private sector share/GDP	Large-scale privatisation	Small-scale privatisation	Price liberalisation	Trade and foreign exchange	Competition policy	Overall infrastructure reform
Hungary	80 %	« 4 »	« 4+ »	« 4+ »	« 4+ »	« 3+ »	« 4- »
Moldova	65 %	« 3 »	« 4 »	« 4 »	« 4+ »	« 2+ »	« 2+ »
Poland	75 %	« 4-↑ »	« 4+ »	« 4+ »	« 4+ »	« 3+ »	« 3+ »
Romania	70 %	« 4- »	« 4- »	« 4+ »	« 4+ »	« 3↑ »	« 3+ »
Slovak Rep.	80 %	« 4 »	« 4+ »	« 4+ »	« 4+ »	« 3+ »	« 3+ »
Slovenia	70 %	« 3 »	« 4+ »	« 4 »	« 4+ »	« 3- »	« 3 »

Source : Transition Report 2010, European Bank for Reconstruction and Development

The transition indicators range from 1 to 4+, with 1 representing little or no change from a rigid centrally planned economy and 4+ representing the standards of an industrialised market economy.

↑ and ↓ arrows indicate a change from the previous year. One arrow indicates a movement of one point (from 4 to 4+, for example). Up arrows indicate upgrades, down arrows indicate downgrades.

Les rapports de 1997 et 2000 de la Commission Européenne soulignaient que le processus de restructuration et de privatisation avaient pris du retard et manquaient de transparence, retardant ainsi l'émergence d'un secteur privé dynamique et compétitif et que les problèmes de la corruption et du marché noir devaient être résolus. Depuis, la Roumanie a développé une politique industrielle considérée conforme aux principes communautaires. La Roumanie a adopté une série d'initiatives en faveur du développement des petites et moyennes entreprises (PME), notamment : la participation au programme pluriannuel pour les entreprises, l'adhésion depuis 2002 à la charte européenne des petites entreprises, l'adoption en 2004 d'une loi sur les incitations à la création et au développement de PME, la simplification et l'amélioration des procédures administratives, la création d'un Fonds de garantie... Néanmoins, cette politique reste contrainte par certaines faiblesses structurelles.

II - Les conditions de la privatisation

Le développement du secteur privé peut se réaliser de deux façons concomitantes : la privatisation des entreprises d'état et la stimulation de l'entrepreneuriat privé. Les grandes entreprises d'État privatisées ont été peu favorables en général à l'instauration des nouvelles règles de marché, à la transformation des structures productives. Elles ont eu plutôt tendance à résister aux modifications et exploiter leurs situations de monopoles. En revanche, la création d'entreprise et l'entrepreneuriat jouent un rôle moteur dans le domaine de l'innovation. Le nombre de création d'entreprises ne cesse de croître en Roumanie depuis le début de la transition, comme indiqué ci-dessous :

Tableau 3 : Evolution des TPE et PME en Roumanie, 1999-2005

Taille des entreprises	1999	2000	2001	2002	2003	2004	2005
Micro	294.597	279.893	280.448	285.207	313.485	358.242	477.969
Petite	25.987	29.417	31.249	32.010	34.883	36.080	39.721
Moyenne	6.102	6.864	7.455	7.989	8.342	8.674	8.576
Total	326.686	316.174	319.152	325.206	356.710	402.996	526.318

Source : Neault (2007)

Cependant, la densité des TPE/PME de 24,3 pour 1000 habitants fin 2005, contre 54 à l'ouest de l'Europe (Neault, 2007), est insuffisante. Or pour Chandan, Mumtaz, et Parkash (2009), la croissance et le développement des PME permettent dans les pays pauvres ou émergents

d'atténuer la pauvreté et la promouvoir les exportations. Les PME auraient joué un rôle crucial dans le développement de pays tels que Taiwan. Dans les pays développés, la promotion des PME serait l'un des moyens de booster l'activité. Certaines études définissent les PME à partir du nombre de salariés, d'autres en fonction de l'ampleur de l'activité. Pour Nuno Castel-Branco (2003), les différences de la structure de la dynamique sociale et économique entre secteurs impliquent des politiques de promotion des PME différenciées. Les politiques pro-PME peuvent viser, entre autres, la mobilisation du secteur informel, la création d'emploi, la meilleure allocation des capitaux nationaux et l'innovation technologique.

III - Dynamisme des TPE/PME en Roumanie

Depuis le début de la transition, l'économie roumaine s'est beaucoup privatisée. Selon la classification d'Eurostat en micro-, petites, moyennes et grandes entreprises en fonction du nombre de salariés, la plupart des entreprises sont des micro-entreprises :

Tableau 5 : STRUCTURE DES ENTREPRISES ACTIVES par taille ET PAR SECTEUR, en 2008

Types d'entreprise :	Micro 0 - 9 salariés	petites 10 - 49 salariés	moyennes 50 - 249 salariés	grandes 250 salariés et plus
Industrie et construction	78,60%	15,70%	4,70%	1,00%
Commerce et autres services	92,30%	6,60%	1,00%	0,10%

Sources : Institut National de Statistica (INSSE), ROMANIA

En France et au Japon, la part des TPE/PME est très élevée, elle est respectivement de 97 % et 99%, mais avec densité d'entreprise beaucoup plus importante. L'auto-emploi, pour faire face au chômage et à la précarité, explique en partie le phénomène de la micro entreprise. Mais, pour Nuno Castel-Branco (2003), la TPE/PME ne peut être une fin en soi. La nature de l'accumulation capitaliste est d'éviter la concurrence grâce à l'accroissement de la taille de l'entreprise au moyen par exemple des fusions et acquisitions, ou de l'extension interne via l'investissement. Mais, une autre stratégie, celle de favoriser les interactions inter-entreprises (M. Perry, 1999) par un développement horizontal (association de petites structures complémentaires) permet de palier à la petite taille des entreprises. Plusieurs types de réseaux d'entreprises : les districts industriels, les milieux innovateurs, les grappes d'entreprises (clusters) ont émergé depuis une vingtaine d'années, avec le modèle des districts italiens.

La Roumanie tente d'intégrer cette dimension. Elle a participé, par exemple, au projet européen OMNI-NET (Opto-Micro-Nano Innovative Network Exploiting Transversality) coordonné par Opticsvalley (le réseau des acteurs de l'optique, de l'électronique et du logiciel en Ile de France) de décembre 2005 à mai 2008, dans le cadre du programme « Europe Innova » de la Commission européenne. L'objectif principal du projet était de favoriser le développement de coopérations entre 6 réseaux européens dans les domaines de l'optique, de la micro-électronique et des nanotechnologies, et de lancer des coopérations technologiques au niveau européen.

La mobilisation des acteurs publics, comme privés, dans la mise en place de réseaux est jugée essentielle afin de donner aux entreprises l'accès à de nouveaux marchés, à des équipements, ressources ou infrastructures, ... Le phénomène cluster est présent dans de nombreux pays occidentaux mais aussi au Sud (Brésil et Inde notamment). Les entreprises ne pourront bien tirer leur épingle du jeu relativement à la mondialisation qu'en se positionnant ainsi au cœur des réseaux, qui sont une source d'innovation.

Conclusion:

Le secteur privé connaît un véritable dynamisme caractérisé par l'évolution positive du nombre de créations d'entreprise ainsi que la mise en place de politiques industrielles favorables aux entreprises. Cependant, la Roumanie souffre encore d'un retard par rapport à d'autres pays en transition de la région, tels que la Hongrie ou la Pologne. Le secteur privé souffre de la très petite taille des entreprises et surtout de la faiblesse de la densité des entreprises par rapport au nombre d'habitants. Outre la poursuite nécessaire des efforts de la Roumanie pour renforcer son secteur productif, le développement de réseaux d'entreprises peut s'avérer être une solution intéressante pour renforcer le dynamisme économique.

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DEVELOPMENT OF THE E-GOVERNMENT MARKET IN THE EUROPEAN UNION: AN ANALYSIS OF THE SUPPLY VERSUS DEMAND SIDES

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E-government represents one of the most palpable results of the dynamic development of the information and communication technology. Defined mostly as an intensive use of information technologies to provide public services, e-government has been approached in the literature rather from a technological perspective, with a significant importance given to the supply and a lower attention paid to the demand side. The increasing interest in taking into consideration the demand side in the development of the e-government initiatives and projects has created the foundation for a shift in the way the conceptual framework for e-government planning and implementation is defined, from the technology infrastructure and costs to the customer-centric character of all the efforts done.

The European Union put e-government on its agenda aiming to improve access to the public information and services, increase transparency of public administration, exploit effectively the information technology within public administration, and establishing e-procurement. The development of the e-government services in the Member States, as it is expressed by the data regarding the supply and demand side, has been conducted in a more or less different manner that led, at the Union's level, to a relatively high availability but a rather low usage of the specific services.

The paper explores the relationship between the e-government supply and demand based on the secondary data referring to the public services available to the citizens (as these are defined by the Eurostat methodology) and the usage of these services by the individuals, integrating them through an analytical matrix inspired by the BCG model. Probably the most important conclusion of this analysis states that development of the e-government services has not been accompanied by measures meant to stimulate their usage in the most of the European Union Member States. The analytical matrix allowed also the identification of the question mark, star, cash cow and dog Member States in terms of the e-government market development.

Keywords: e-government market, demand, supply, European Union

JEL Classification: M31

Introduction

The recent dynamic development of new information and communication technologies have changed significantly the everyday life of all the members of the society and offered the government new possibilities for providing citizens and businesses with better, more efficient services (Verdegem and Verleye 2009: 487). As the consumers throughout the world expect twenty-four hours a day, seven days a week availability in their commercial interactions, citizens, in their role of consumers of democracy, tend to expect the same from their government (Evans and Yen 2006: 207-208).

Encapsulating a wide variety of meanings ranging from policies that foster the development of information infrastructures to particular measures for combating the “digital divide”, e-

government is defined as the use of technology, particularly the Internet, as a means to deliver services to citizens, businesses, and other entities (Akman et al. 2005: 240). In a broader sense, e-government has been defined as the intensive use of information technologies for the provision of public services, the improvement of managerial effectiveness and the promotion of democratic values and mechanisms (Gil-Garcia and Pardo 2005: 187-188).

A significant part of the literature on e-government assumes that once the correct technology is implemented and accessible to the citizens, benefits will be delivered in terms of reduced costs, technical efficiency, greater access, accountability and transparency, and even greater 'e-participation' and 'e-democracy'. Yet, even technically successful, systems fail if intended recipients simply do not use them (Gauld, Goldfinch and Horsburgh 2010: 184).

A study conducted in the Netherlands has found that the majority of the respondents perceives rather positive the usefulness, tend to trust and intend to adopt government e-services (Horst, Kuttschreuter, and Gutteling 2007: 1850). Another study, conducted in Australia and New Zealand, addressing the human demand-side of the e-government, has found that the majority of respondents are reluctant to use some of the more sophisticated transactional e-government measures, the high users of information and communication technology are more likely to use e-government measures, and are more positive towards e-government in general (Gauld, Goldfinch and Horsburgh 2010: 184).

Successful implementation of e-government imposes changes in business processes that are performed inside governmental institutions, despite of many limitations such as the rigid structures and political reasons (Indihar Stemberger and Jaklic 2007: 229). Understanding the e-government processes of policy making is critical for the evaluation of the e-government initiatives and enablement of the appropriate technical, managerial, and political adjustments to be done by the public managers (Yildiz 2007: 661).

The conceptual framework for e-government planning and implementation surrounds the traditional marketing mix components – product, price, place, and promotion, with the customer focus perspective of customer relationship management, encompassed in the discipline and rigor of program management (Rose and Grant 2010: 32).

Promoting the use of e-government among citizens and businesses, suppose accomplishment of two interrelated actions: first, customers must be educated with respect to the scope of services and utility of the e-Government initiatives; secondly, customers must be convinced that use of the e-government applications will provide value to them (Rose and Grant 2010: 30).

The European Summits at Lisbon and Feira put e-government on the European agenda aiming the development of Internet-based services to improve access to public information and services, the improvement of transparency of public administration by using the Internet, full exploitation of information technology within public administration, and establishing e-procurement (Strejcek and Theil 2002: 305).

Methodological Notes

Data referring to the e-government availability (supply side) and, respectively, individuals using the Internet for interacting with public authorities (demand side) in the European Union countries between 2001 and 2010 have been collected from the Eurostat database.

E-government availability (supply side) measures the online availability of 20 elementary public services based on a sample of public authorities' web sites (such as central government, regional and local administration, police and social security organizations) agreed with Member States as relevant for each service. The public services for citizens measured are: income taxes, job search services, social security benefits, personal documents, car registration, application for building permission, declaration to the police, public libraries, birth and marriage certificates, enrollment in higher education, announcement of moving, and health-related services. The public

services for businesses measured are social contribution for employees, corporate tax; value added tax, registration of new companies, submission of data to statistical offices, customs declarations, environment-related permits, and public procurement.

E-government usage by individuals (demand side) measures the ratio of the individuals aged 16 to 74 that use the Internet to interact with public authorities, respectively for obtaining information from public authorities web sites, downloading official forms, sending filled in forms.

Percentages expressing the availability and usage of the e-government services at the level of the European Union and each of the Member States have been considered to construct an **analytical matrix of e-government services development and employment** inspired by the BCG matrix, where each of the Member States has been positioned in relationship with the average European performances in one of the four quadrants: (1) **question marks** (e-government supply above and e-government demand below the European average), (2) **stars** (e-government supply and demand both above the European average), (3) **cash cows** (e-government supply below and e-government demand above the European average), and (4) **dogs** (e-government supply and demand both below the European average).

Main Findings

There are two main conclusions that can be drawn assessing the supply side of the e-government market in the European Union: (1) the availability of the e-government services, as it is defined in terms of the Eurostat methodology, is high: as an average, 84.3 % of the elementary public services are available at the EU level; (2) dynamics of the supply side is more than impressive: in just three years, the availability of the elementary public services has increased, at European level, from 58.3 % to 84.3 %.

Table 1. E-government availability (supply side) in the European Union countries 2001–2010

Countries	Years							
	2001	2002	2003	2004	2006	2007	2009	2010
Belgium		25.0	35.0	35.0	47.4	62.5	68.7	78.7
Bulgaria	-	-	-	-	-	13.7	40.0	70.0
Czech Republic	-	-	-	31.2	33.3	57.5	62.5	73.7
Denmark	31.6	61.1	72.2	60.5	65.8	60.5	84.2	94.7
Germany	20.0	35.0	40.0	47.4	48.7	71.9	73.7	94.7
Estonia	-	-	-	65.8	81.6	72.5	92.5	93.7
Ireland	22.2	53.7	60.2	51.8	51.8	51.8	79.6	100
Greece	10.5	31.6	31.6	31.6	30.0	45.0	45.0	47.5
Spain	30.0	40.0	40.0	55.0	56.7	68.7	80.0	95.0
France	25	36.7	50.8	50.0	65.0	72.5	77.5	85.0
Italy	15.0	35.0	46.7	54.4	61.4	68.7	68.3	100
Cyprus	-	-	-	25.0	37.5	46.2	51.2	55.0
Latvia	-	-	-	6.2	10.0	27.5	66.2	93.3
Lithuania	-	-	-	40.0	42.5	36.7	61.7	71.7
Luxembourg	5.0	5.0	16.2	21.2	21.2	41.2	64.5	72.4
Hungary	-	-	-	15.0	50.0	42.5	52.6	65.8
Malta	-	-	-	40.0	78.3	91.2	100	100
Netherlands	5.3	21.0	26.3	32.9	56.1	63.2	71.0	94.7
Austria	15.0	20.0	69.7	75.9	83.3	100	100	100
Poland	-	-	-	10.0	20.0	21.2	55.3	78.7

Portugal	31.6	34.2	39.5	42.5	61.7	81.2	100	100
Romania	-	-	-	-	-	37.5	47.5	60.0
Slovenia	-	-	-	45.0	68.7	91.2	95.0	95.0
Slovakia	-	-	-	15.0	20.0	30.0	56.2	62.5
Finland	33.3	50.0	61.1	69.4	63.9	65.3	86.1	95.0
Sweden	27.8	69.4	69.4	76.3	76.3	75.0	95.0	100
United Kingdom	23.5	36.1	50.0	58.8	67.5	77.6	93.0	98.2
EU 27	-	-	-	-	-	58.3	72.9	84.3

Source: Eurostat.

In terms of availability, Ireland, Italy, Malta, Austria, Portugal and Sweden have reached the maximum level of 100 %, while United Kingdom, Spain, Slovenia, Finland, Denmark, Germany, Netherlands, Estonia, Latvia, and France are above the European average. The lowest levels of e-government availability have been registered in Greece, Cyprus, and several countries of the Central and Eastern Europe – Romania, Slovakia, Hungary, Bulgaria, Lithuania, and Czech Republic. Somewhat surprisingly, Luxembourg, Belgium and Poland have availability below the European average.

There are two main conclusions that can be drawn assessing the demand side of the e-government market in the European Union: (1) the usage of the e-government services by the individuals is rather low: as an average, only 28.1 % of the individuals are accessing the public services available online at the EU level; (2) dynamics of the supply side is positive but far less impressive by comparison to that of the supply side: from 2004 to 2010, the degree of e-government services usage has increased, at European level, from 19.6 % to 28.1 %.

Table 2. Individuals using the Internet for interacting with public authorities in the European Union countries 2002–2010

Countries	Years								
	2002	2003	2004	2005	2006	2007	2008	2009	2010
Belgium	-	-	-	15.9	25.6	20.7	14.3	27.2	27.8
Bulgaria	-	-	3.9	-	5.7	4.3	6.4	7.9	12.8
Czech Republic	-	3.4	3.1	3.3	-	14.0	13.1	22.8	15.3
Denmark	35.1	39.4	42.5	-	39.3	57.7	41.3	65.4	68.2
Germany	14.0	23.3	31.3	-	27.8	39.1	31.1	35.3	34.6
Estonia	-	-	14.2	29.0	26.6	27.4	33.0	43.0	46.9
Ireland	-	9.6	11.4	14.4	21.3	26.4	21.2	23.3	22.3
Greece	3.5	6.1	7.2	4.7	5.5	9.5	8.8	10.7	10.9
Spain	-	19.5	22.0	22.5	23.7	25.1	27.8	28.6	30.9
France	-	-	-	-	24.4	36.6	40.5	36.0	29.7
Italy	-	-	-	13.0	14.8	15.2	13.8	15.1	15.9
Cyprus	-	-	10.4	10.9	12.0	18.4	14.9	21.1	20.6
Latvia	-	-	12.1	12.2	22.6	17.0	14.4	22.2	30.7
Lithuania	-	6.0	8.9	11.3	12.6	17.6	18.2	17.7	18.0
Luxembourg	14.9	25.0	35.6	38.2	36.3	44.2	41.6	44.4	44.9
Hungary	-	-	14.9	15.1	13.6	21.7	22.2	22.9	26.3
Malta	-	-	-	18.0	14.0	21.9	18.1	22.7	25.1
Netherlands	11.6	14.7	17.2	40.7	46.0	49.1	48.1	49.9	55.0
Austria	7.9	14.4	17.6	24.9	28.9	24.0	36.2	35.4	34.9
Poland	-	-	11.9	10.7	-	12.1	14.0	16.3	18.0

Portugal	3.9	9.7	10.3	11.8	14.0	16.8	15.2	18.0	20.5
Romania	-	-	2.5	-	2.6	4.0	8.5	5.8	6.3
Slovenia	-	-	11.7	17.6	28.0	28.1	29.2	30.5	40.4
Slovakia	-	-	20.9	23.7	27.2	20.1	26.0	26.0	32.8
Finland	31.4	38.5	43.3	44.6	40.5	43.2	46.3	45.0	48.6
Sweden	40.0	41.1	35.8	48.7	-	47.2	45.1	48.2	56.9
United Kingdom	6.4	18.8	19.5	22.1	-	32.9	26.1	29.7	32.8
EU 27	-	-	19.6	20.7	21.5	26.9	25.5	27.5	28.1

Source: Eurostat.

Countries with percentages far above the European average in terms of the usage of e-government services by individuals were, in 2010, Denmark, Sweden and Netherlands, where more than a half of the population has used e-government applications for interacting with the public authorities. Finland, Estonia, Luxembourg, Slovenia, Austria, Germany, Slovakia, United Kingdom, Spain, Latvia, and France were above the European average. The lowest levels of e-government usage have been registered in Romania, Greece, Bulgaria, Lithuania, Czech Republic, Italy, Poland, Portugal, Ireland, Cyprus, Malta, Hungary, and Belgium.

Assessment of the correlation between the supply and demand sides of the e-government services reveals that a connection of an average intensity, Pearson correlation coefficients calculated for the years 2007, 2009, and 2010 having the following values: 0.4068 (2007), 0.5324 (2009), and 0.4959 (2010). This means that development of the e-government services has not been accompanied by measures meant to stimulate their usage by the individuals: the extensive focus of the public authorities on making available the e-government services has determined them to neglect the communication to the citizens in order to present, explain, and convince them to use on a larger scale these services. Another possible explanation of this disparity is the lack of concordance between the real needs of the citizens in terms of the public services and the range of these services made available online by the public authorities.

Analysis of the e-government market in the European Union in terms of demand and supply using the matrix of e-government services development and employment, leads to the following positioning of the Member States:

-question marks (e-government services supply above and demand below the European average): four Member States – Ireland, Italy, Malta, and Portugal – are positioned in this category. As an interesting fact, all these countries have apparently solved the e-government infrastructure, as the availability of the specific public services is 100%! By contrast, the usage of the e-government services is below the average, which raises at least two questions: first, how opportune was the investment of the public money in developing the e-government services in terms of the society's and citizens' needs for an effective public administration? Secondly, how appropriate was the promotion of the usage of these services among the consumers in terms of the communication effectiveness regarding the usage of these services?

-stars (e-government services both supply and demand above the European average): twelve Member States are positioned in this quadrant – Denmark, Germany, Estonia, Spain, France, Latvia, Netherlands, Austria, Slovenia, Finland, Sweden, and United Kingdom. From these, only Austria and Sweden have managed to reach 100% coverage in terms of the e-government services provided to the public. The development of e-government market in these countries should consider both expanding the range of specific services made available to the public and increasing the usage of these services, with a different focus from a market to another;

-cash cows (e-government services supply below and demand above the European average): Luxembourg and Slovakia are the only two countries in which citizens are using more

intensively the e-government services provided to the public. The development of e-government market in these countries should consider both expanding the range of specific services made available to the public and increasing the usage of these services, with a focus on the range of e-government services. It is rather difficult to conclude that Luxembourg and Slovakia may be viewed as potential models for the development of the e-government market in the European Union, their demographic, economic, and technological profile being atypical, to a certain extent, for the EU Member States;

-dogs (e-government both supply and demand below the European average): nine countries are positioned in the quadrant having the poorest situation, out of which six are from the Central and Eastern Europe – Bulgaria, Czech Republic, Lithuania, Hungary, Poland, Romania, and Belgium, Greece, Cyprus completing the group. These countries should consider in the development of their e-government markets both the significant enlargement of the range of specific services provided to the public and a more consistent effort to increase the usage of these services.

Conclusions and discussion

The current e-government projects conducted in each of the Member States of the European Union do not reveal a harmonized approach, but rather a consistent but somewhat uncoordinated effort (Strejcek and Theil 2002: 312). Although the finality of the e-government development is to facilitate access and provide high quality public services lowering the administrative burden, this target will be difficult to be reached in a context characterized by a relatively high availability but a rather low usage of the specific services. Engaging citizens in using on a more extensive scale the e-government services available in the market could represent the focus of the future of the development strategies implemented in the most of the Member States. In the new context of the government – citizen relationships, created by the Internet, a “willing citizenship” is the most important tool for the successful implementation of e-government (Evans and Yen 2006: 228).

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PORTFOLIO ANALYSIS – A BASIC INSTRUMENT IN STRATEGIC PLANNING. CASE STUDY ON THE ROMANIAN INSURANCE MARKET

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Practice proved that strategic planning is a necessary process for insurance companies. This process can help companies to adapt more easily to environmental changes. The strategic planning of the activity of an insurance company cannot be realized without a careful analysis of the evolution of the market and without studying the company's market position. A classic model used in the portfolio analysis is the Boston Consulting Group model. In this paper we have used the model for studying the activity of the leader of the Romanian insurance market. In 2009 Alliantz Tiriac had 17 types of insurance in the portfolio. Each class of insurance was considered a strategic business unit. We have studied the insurance portfolio by using secondary data from specialized publications, such as the Romanian Insurance Supervisory Commission. Using the data, we have calculated for Alliantz Tiriac, for each class of insurance, the relative market share. The company was leader on the market for five classes of insurance. The economic crisis had a severe impact on the evolution of the Romanian insurance market: from the 17 classes of insurance studied: nine had registered a decrease of the market, eight had registered an increase, but only for three of them the growth exceeded 10%. Using the relative market share and the market growth we have identified the “cash cows”: there are five classes of insurance in this category, among which the “Insurance for land vehicles (CASCO)” which represented more than half of the sales (55.82%); unfortunately, in the case of this insurance type there was a very significant decrease of the market in 2010 compared to 2009: -25.12%, the “question marks” – there are three classes of insurance in this category, and the “dogs”. Due to the crisis, a large number of the company's products are in this category and there are no “star” products. This work was supported by CNCSIS – UEFISCSU, project number 915 / 2009 PNII – IDEI 1773/2008

Keywords: insurance market, strategic business unit, BCG model, market growth, relative market share

JEL code: M31, G22

I. The strategic planning and the portfolio analysis

Strategic planning is the process through which a company defines its long-term objectives, analyses its situation and sets the strategies and methods by which these could be implemented. This is done on several organizational levels: the superior organizational level, the strategic business unit level and the functional level. (Virgil Balaure et al., 2002: 577)

The activity of an insurance company can be planned at the level of each strategic business unit. A strategic business unit (SBU) is a division of the company, which has a separate mission and

separate objectives, and which can be planned for independently of the other divisions (Philip Kotler, et al., 1998: 1114).

The strategic business unit can be a brand or an insurance product of the company (for small and medium size enterprises), an insurance category, for instance: mandatory motor third party liability insurance (Petrescu E.C., 2005: 272). The activity portfolio of a company is formed of the totality of its strategic business units.

The models of portfolio analysis allow for the classification of strategic business units (SBUs) and for their analysis. Function of this analysis, the manager can establish, avoiding a subjective approach, the most suitable strategy for each strategic business unit, can determine which are the profitable strategic business units, spot the ones he needs to invest in and the ones he should give up on.

However, these models cannot be considered a universal remedy, an ideal means of diagnosis, their role being to help the manager understand the situation of each strategic business unit.

There are several analysis models, the most well-known being: the Boston Consulting Group I model, the General Electric (McKinsey) model, the Arthur D. Little model, the Boston Consulting Group II matrix.

The models of portfolio analysis have 'developed the analytical and strategic capacity of managers' (Philip Kotler, 1997: 119) and thus the quality of strategic planning has increased. It is the reason for which these are used by 75% of the first 500 top companies in the world. (Philip Kotler, et al., 1998: 123)

The models of portfolio analysis offer a clear image of the activity of the company, indicating whether it has a well structured portfolio.

Besides the numerous advantages resulting from the use of the models of portfolio analysis, there are a series of disadvantages, among which the most important are the following:

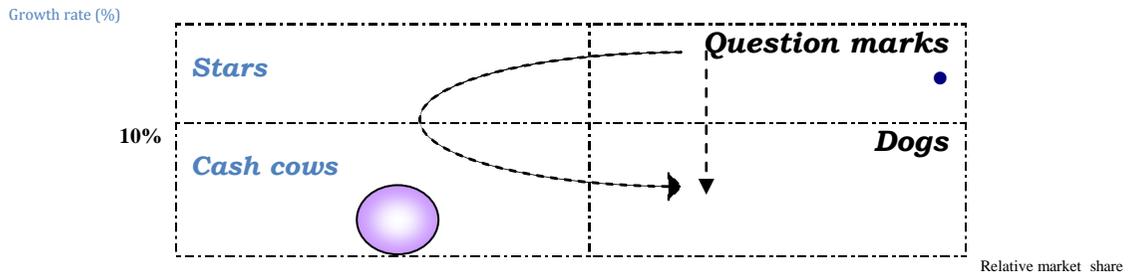
- the methods refer to the current products of the company, as it cannot consider the products which are going to be launched.
- the number of indicators used is limited (especially in the case of the Boston Consulting Group I matrix), and these are not the only relevant indicators for the situation of the company on the market.
- the use of the models can be difficult.

II. The Boston Consulting Group Model

The BCG model (the growth - market share matrix) is based on the idea that the growth rate of the market and the relative market share are the main factors influencing the market strategy of the company. For each criterion, the BCG specialists have chosen a differentiation ceiling. For **the relative market share** the differentiation ceiling is the value 1.00 of the relative market share, value function of which products are divided into leader position products and non-leader products. Regarding **the market growth rate**, the average growth rate of the market has to be taken into consideration. It will help make the distinction between a quickly growing market and a slowly growing one, or one in stagnation or decrease. In the initial matrix, the average value of the growth rate was of 10%. Today, the market growth rate is no longer the same, thus the average growth rate of the market should be computed.

Function of these two criteria, the products are positioned in one of the four categories of the BCG model: 'question marks', 'stars', 'cash cows', or 'dogs'.

Figure 1. BCG I Matrix



1

When a company launches a new product on the market it enters the ‘question marks’ category. If it does not succeed in becoming market leader, the product is categorized as a ‘dog’. If it is successful and becomes a leader, the product enters the ‘stars’ category, and as the market growth rate decreases, it enters the ‘cash cows’ category. Finally, due to innovations brought to competing products, the product may become a ‘dog’. The features of the four groups of products are (Petrescu E.C., 2005: 286):

- 1) The products in the ‘cash cows’ category are certain values, which bring profits and supply cash for financing the products in the other categories. These products contribute to the development of the company.
- 2) The products in the ‘stars’ category contribute to the increase in the turnover of the company and to improving its image. These products require investment to maintain or increase their market share.
- 3) ‘Question marks’ are products whose market is developing, the products being though unable to reach supremacy on the market. Their future evolution is uncertain and requires liquidities to ensure their financing. If they have positive perspectives, the company should invest in these products, if not they should be eliminated from the company’s product portfolio.
- 4) The products in the ‘dogs’ category do not usually contribute to obtaining a substantial profit or to using it for the development of the company. These are products that the company should eliminate from its portfolio, unless other strategic interests intervene.

III. The BCG analysis in the ALLIANZ –ȚIRIAC case on the insurance market in Romania

Function of the type and nature of the risks insured, the Romanian market has two important insurance categories: general insurance and life insurance.

General insurance are in turn divided in 18 insurance classes: I. Accident and health insurance (including work related accidents and professional diseases), II. Health insurance, III. Land transport vehicles insurance (other than railroads), IV. Railroad transport insurance, V. Air transport insurance, VI. Marine insurance (including maritime, lake and rivers transport means), VII. Goods in transit insurance, VIII. Fire and other natural disasters insurance, IX. Other goods insurance, X. Third party motor liability insurance, XI. Third party liability insurance for air transport, XII. Third party liability insurance for maritime, lake and rivers transport means, XIII. General third party liability insurance, XIV. Credit insurance, XV. Collateral insurance, XVI. Financial loss insurance, XVII. Legal protection insurance, XVIII. Assistance of persons in difficulty during travel or leave of domicile or permanent residence insurance. Life insurance is divided in the following insurance classes: I. Life insurance, annuities and supplementary life insurance, II. Marriage insurance, birth insurance, III. Life insurance and annuities which are tied to investment funds, IV. Permanent health insurance, B1. Accident insurance (including work accidents and professional diseases), B2. Health insurance.

The evolution of the insurance market in the 2005-2010 period is presented in Table 1.

Table 1. Development of gross written premiums in insurance contracts - 2005-2010

Years	Volume of gross written premiums (lei)	Volume of gross written premiums (mil. Euro)	Nominal growth compared to the previous year %	Real growth %	Inflation rate %
2005	4,417,165,819	1,201.26	27.07%	17.01%	8.6%
2006	5,729,284,541	1,694.20	29.70%	23.68%	4.8%
2007	7,175,789,699	2,033.83*	25.25%	17.53%	6.57%
2008	8,936,286,505	2,242.48**	24.53%	17.15%	6.3%
2009	8,869,746,957	2097.86***	- 0.74%	-5.24%	4.74%
2010	8,364,494,470		-5.70%		

Sources: CSA, Rapoarte anuale 2002-2009; *Buletin Informativ* - Anul V, Nr. 1 - martie 2011, INS, Anuar statistic 2010

Computed function of the leu/Euro exchange rate from the 31st Dec. 2007: 3.582*, from the 31st Dec. 2008: 3.985**, 31st Dec. 2009: 4.228***

The evolution of the insurance market for each of the insurance classes in Romania is presented in Table 2 and Figure 2. One can notice that most insurance classes were affected by the crisis.

Table 2. The evolution of gross written premiums by insurance classes 2005-2010, mil. lei and %

	2005	2006	2007	2008	2009	2010	2006/ 2005	2007/ 2006	2008/ 2007	2009/ 2008	2010/ 2009
GI	3379,2	4591,0	5726,8	7068,2	7241,6	6698,5	35,9%	24,7%	23,4%	2,5%	-7,5%
I	63,1	101,7	66,2	62,5	62,9	57,8	61,2%	-34,9%	-5,5%	0,7%	-8,1%
II	19,0	29,8	23,7	28,2	24,9	21,1	57,0%	-20,4%	18,9%	-11,9%	-15,0%
III	1342,0	1864,6	2619,9	3557,0	3331,0	2494,2	38,9%	40,5%	35,8%	-6,4%	-25,1%
IV	1,2	2,3	3,9	4,5	5,6	4,3	85,9%	67,5%	17,7%	22,7%	-22,1%
V	10,0	17,4	14,1	21,2	21,3	20,5	75,2%	-19,1%	50,0%	0,5%	-3,4%
VI	26,8	31,7	30,6	23,0	30,2	23,8	18,0%	-3,3%	-25,0%	31,3%	-21,2%
VII	30,5	47,1	40,1	44,0	40,9	42,5	54,7%	-14,9%	9,7%	-7,0%	4,0%
VIII	470,5	534,1	648,3	849,7	934,7	971,2	13,5%	21,4%	31,1%	10,0%	3,9%
IX	69,3	169,5	193,6	208,2	163,7	129,6	144,5%	14,2%	7,5%	-21,3%	-20,9%
X	965,2	1231,3	1500,3	1843,8	2252,1	2505,7	27,6%	21,9%	22,9%	22,1%	11,3%
XI	14,2	23,2	18,1	27,0	24,2	16,4	63,2%	-22,1%	49,2%	-10,3%	-32,1%
XII	4,5	3,7	3,0	5,3	10,6	14,9	-17,6%	-18,5%	76,0%	98,1%	40,4%
XIII	66,6	93,9	107,4	128,7	135,8	145,8	41,0%	14,4%	19,8%	5,5%	7,4%
XIV	262,0	395,9	395,5	190,6	115,6	118,8	51,1%	-0,1%	-51,8%	-39,3%	2,7%
XV	2,8	4,9	5,2	12,6	30,0	66,4	76,7%	6,3%	144,2%	137,1%	121,6%
XVI	7,5	6,4	10,2	13,4	15,7	14,3	-14,3%	59,1%	31,3%	16,6%	-8,8%
XVII	0,000	0,010	0,012	0,005	0,007	0,006	-	21,3%	-58,0%	32,1%	-4,9%
XVIII	23,9	33,4	46,6	48,4	42,5	51,1	39,9%	39,3%	3,7%	-12,0%	20,2%
LI	1038,0	1138,3	1449,0	1868,1	1628,2	1666,0	9,7%	27,3%	28,9%	-12,8%	2,3%
LI I	661,0	700,6	928,7	1314,9	1030,1	1007,7	6,0%	32,6%	41,6%	-21,7%	-2,2%
LI II	1,2	1,3	1,6	1,8	1,8	1,8	6,2%	21,7%	13,4%	-2,2%	0,0%
LI III	362,2	416,5	487,8	521,8	565,8	617,7	15,0%	17,1%	7,0%	8,4%	9,2%
LI IV	3,4	10,1	13,9	0,3	0,3	0,2	199,9%	37,8%	-97,9%	7,5%	-26,4%
LI B1	5,1	3,5	12,5	22,5	25,8	29,3	-31,7%	257,8%	79,2%	14,9%	13,5%
LI B2	5,1	6,3	4,5	6,8	4,4	9,2	23,4%	-28,4%	50,6%	-35,3%	109,4%

Legend: GI = General Insurance, LI = Life insurance,

Sources: Report CSA 2009, Report CSA 2008, Report CSA 2007, Report CSA 2006, Report CSA 2005, Informative Bulletin - Year V, No. 1 - March 2011, INS, Statistic Yearbook 2010, own computations.

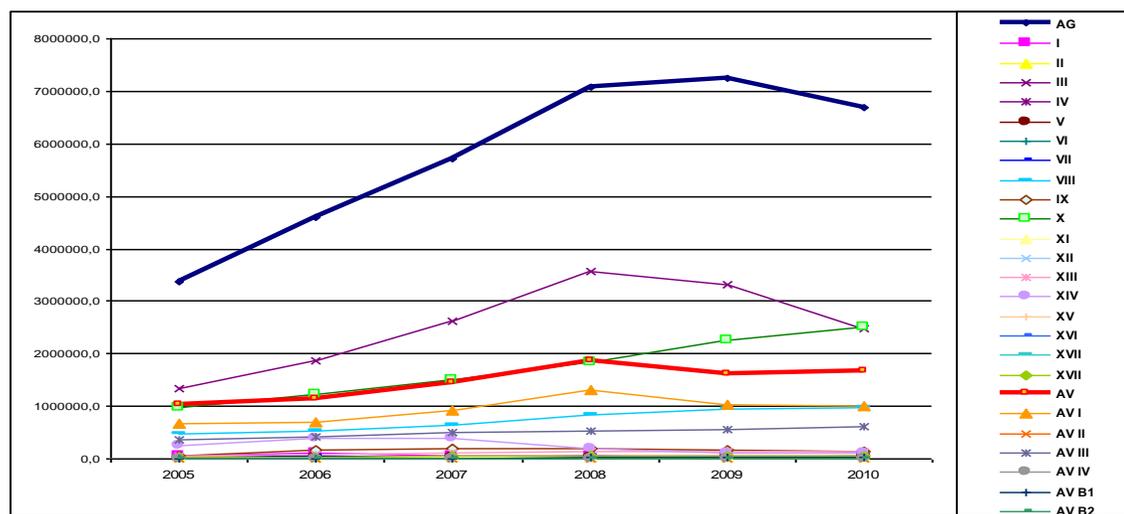


Figure 2. The evolution of the insurance market in Romania - by insurance classes 2005-2010

Sources: Reports CSA 2005-2009, Informative Bulletin - Year V, No. 1 - March 2011

In 2009, the company ALLIANZ - ȚIRIAC ASIGURĂRI S.A. was market leader with a total market share of 14.50%. On the general insurance segment, ALLIANZ – ȚIRIAC was the leader in 2009 with a market share of 16.55%, followed by OMNIASIG VIG S.A. (12.56%), while on the life insurance segment the leader was ING ASIGURĂRI DE VIAȚĂ S.A. with a 32.37% market share, Allianz having a 5.38% share. In 2010, ALLIANZ – ȚIRIAC loses its leadership position, coming second, with a market share of 12.34%, ASTRA taking its place (13.28%). In 2010, on the general insurance segment, ASTRA has a market share of 16.36 % and Allianz is second with 14.03%, while on the life insurance segment ING is the leader with 32.62%, and Allianz second with 5.52%, the same market share as ASIROM.

For a retrospective analysis of the product portfolio of ALLIANZ – ȚIRIAC on the Romanian market in 2009 we have used the BCG method. The situation of the company is presented in Table 3.

Table 3. The situation of ALLIANZ – ȚIRIAC on the insurance market in 2009

	Premiums (lei) ALLIANZ – ȚIRIAC 2009	Premiums (lei) main competitor 2009	Rsi** 2009	Ri (%)** 2009/ 2008	Ri (%)* 2010/ 2009	Sii (%)** 2009	BCG 2009	BCG 2009'
	1	2	3	4	5	6	7	8
GI	1.198.250.654	1.114.407.407	1,0752	2,5%	-7.50%	93,19%		
I	7.410.062	8.386.952	0,8835	0,7%	-8.10%	0,58%	D	D
II	9.788.820	9.712.104	1,0079	-11,9%	-15.04%	0,76%	C	C
III	717.812.565	635.165.532	1,1301	-6,4%	-25.12%	55,82%	C	C
V	218.984	13.631.967	0,0161	0,5%	-3.40%	0,02%	D	D
VI	52.836	9.696.202	0,0054	31,3%	-21.16%	0,004%	Q	D
VII	9.037.500	8.832.564	1,0232	-7,0%	4.03%	0,70%	C	C
VIII	178.852.236	143.322.937	1,2479	10,0%	3.90%	13,91%	C	C
IX	10.851.100	38.401.370	0,2826	-21,3%	-20.86%	0,84%	D	D
X	230.465.259	289.760.090	0,7954	22,1%	11.26%	17,92%	Q	Q
XI	1.363.718	20.651.261	0,0660	-10,3%	-32.13%	0,11%	D	D
XII	160.382	6.370.492	0,0252	98,1%	40.38%	0,01%	Q	Q
XIII	24.913.621	17.285.077	1,4413	5,5%	7.38%	1,94%	C	C
XIV	4.382.854	69.483.319	0,0631	-39,3%	2.73%	0,34%	D	D
XV	588.195	24.834.711	0,0237	137,1%	121.62%	0,05%	Q	Q
XVII	2.352.522	11.164.311	0,2107	32,1%	-4.92%	0,18%	Q	D
LI	87.631.607	527.059.032	0,1663	-12,0%	2.32%	6,81%	C	C
I	39.553.214	220.856.588	0,1791	-21,7%	-2.17%	3,08%	D	D
III	48.078.393	303.221.943	0,1586	8,4%	9.18%	3,74%	D	D
Total	1.285.882.261					100,00%		

Legend: GI = General insurance, LI =Life insurance, Rsi = Relative share for the insurance class i, Ri = The market growth rate for the insurance class i , Sii = The share of the insurance class i in total insurance, Q= Question marks, S= Stars, C= Cash cows, D=Dogs

Source: * Informative Bulletin - Year V, No. 1 - March 2011, **own computations

The indicators used for the BCG analysis are:

- Rsi - relative market share, which was computed in Table 3 by comparing the gross written premiums for an insurance class of ALLIANZ – ȚIRIAC in 2009 to the gross written premiums for the respective insurance class of its main competitor;
- Ri (%) - the growth rate of the market for each insurance class,
- Sii (%) - the share of the gross written premiums for an insurance class i of ALLIANZ – ȚIRIAC in total gross written premiums for ALLIANZ – ȚIRIAC in 2009.

The products were categorized in column 7 function of the growth rate in 2009 function of 2008, and in column 8 we considered the growth rate in 2010 function of 2009.

If Alliantz had made in 2009 the BCG matrix, by using the growth rate of 2009 compared to 2008 (which it knew) – see Table 2 – the positioning of the products would have been similar, the only differences being related to products VI and XVII, which would have been question marks and not dogs. Figure 3 shows the graphic representation of the company's product portfolio

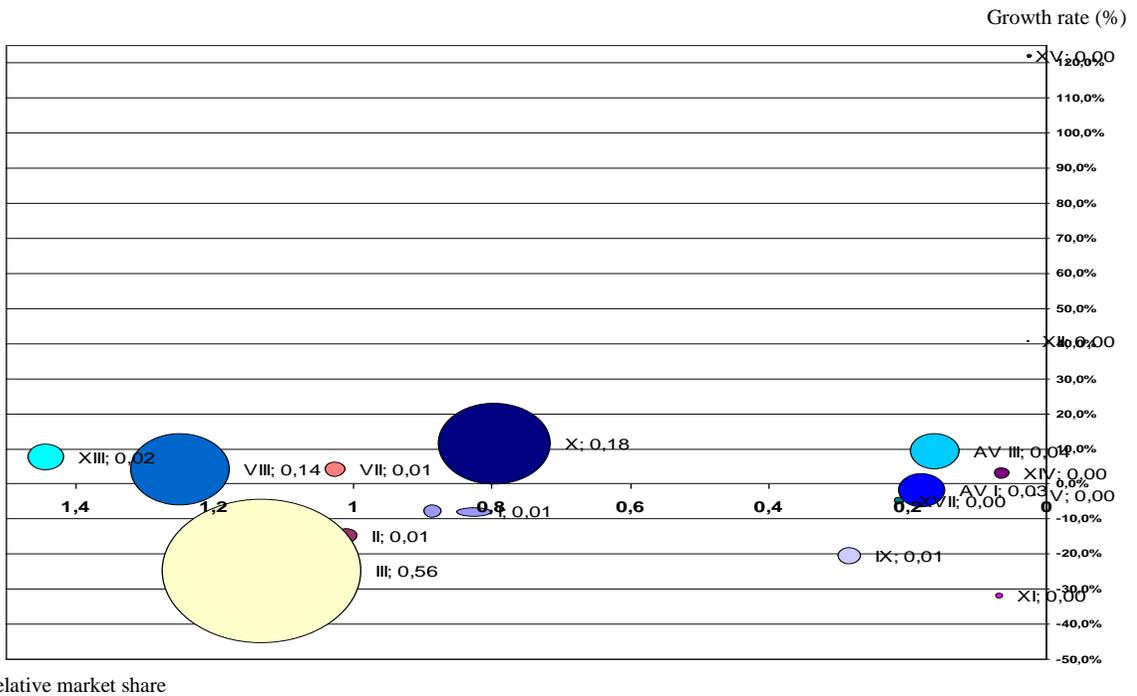


Figure. 3. BCG I matrix for ALLIANZ –TIRIAC in 2009

IV. Conclusions

The insurance types in the ‘cash cows’ category are leader products, valuable for the insurance society and which should be exploited. These are: II Health insurance, III Casco, VII Goods in transit insurance, VIII Fire insurance, XIII Third party general liability insurance. Class III. Land transport vehicles insurance (Casco). CASCO insurance held the largest share in the company portfolio, 55.82%, in 2010 the class has recorded a significant decrease of -25.12%.

The question marks products the company should invest in are the ones from classes: X. RCA (with a relative share of 0.8 and an increase of 11%), XII. third party liability insurance for maritime transport (with a 40.38% increase) and XV. collateral insurance (which had the biggest increase: 121.62%); however, the latter have very low relative shares and a very low share in total written premiums.

The rest of 9 insurance types enter, due to the crisis, in the ‘dogs’ category: over half of the company’s strategic business units are in this category. Another unfavorable element is that there are no products in the ‘stars’ category.

However, this analysis is not sufficient to establish the future of products, as the BCG analysis can be only used as a guide; in order to have a correct and complete image, we should analyse the activities portfolio considering other determining external factors for the evolution of a market, such as: the size of the market, the profit margin, the intensity of competition, technological requirements, social, political and legislative factors, the seasonality and cycle of demand etc., as well as factors related to the potential of the respective insurance class, such as: the quality of services, the competitiveness of prices, the quality of management, of personnel, the distribution network, the efficiency of promotion and of sales.

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COMPETENCES ACQUIRED BY GRADUATES THROUGH MARKETING HIGHER EDUCATION TRAINING – FINDINGS FROM THE EMPLOYERS' PERSPECTIVE

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Abstract

The primary purpose of the economic higher education in providing the graduates with marketing competences is to train them for employment. In light of the said objective, two important aspects must be taken into account by educators. First, the gap between theory and practice must be eliminated. Secondly, educators must select and provide the competences required by employers so that new graduates may obtain employment matching up to their training. The purpose of the present study is to highlight the main dimensions which define employers' perception of the marketing competences developed by the graduates whom they have employed. The starting point of the present scientific endeavour is the evaluation of the variables which define the transversal competences and the marketing-specific competences.

Key words: competences, curriculum, employers, evaluation, quality assurance

JEL Classification: M1, M3, M31

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INTRODUCTION

Romania's economic changes of the last twenty years and particularly the new approach to business peculiar to the market economy have brought about the need for the business people to adopt a business philosophy adjusted to the new context, created specific needs on the labour market and, as a consequence, imposed new requirements concerning the competences acquired by graduates during their academic training. Therefore, the academic environment currently voices a particular concern over the competences that a student should acquire during his/her academic training so that, after graduation, he/she may be able to perform all the activities pertaining to marketing in a professional way. This concern comes first from the universities' interest in having an offering adjusted to the needs of the business environment, which is a

criterion for competitiveness on the labour market, and from the national, European and even international framework of qualifications in higher education.

The objectives set by the European Union through the Bologna Declaration (June, 1999), Lisbon Summit (March 2000), Copenhagen Declaration (December 2002), Ministerial Conference in Berlin (September 2003), Ministerial Conference in Bergen (May 2005) and Ministerial Conference in London (May 2007) are to reform the higher education systems so that they should become capable of providing offerings compliant with the needs of the contemporary society. The corresponding body in Romania which implements these European orientations is the National Agency for Qualifications in Higher Education and Partnership with the Social and Economic Environment (ACPART) which set up the National Framework of Qualifications in Higher Education (CNCSIS) in February 2008. CNCSIS “complies with the European requirements concerning the access to and advancement in the academic career and student mobility and satisfies the national needs by creating a coherent model of organization and classification of qualifications, by exposing the academic training system to the social and economic environment and ensuring balance between supply and demand of education and training” (CNCSIS 2008). The CNCSIS’ objective in terms of university curriculum optimisation in Romania relies heavily on extensive research for each particular specialization and the involvement of competent and motivated researchers. Settling this issue, however, is not as simple as it might seem on the surface in view of the fact that the interest in this topic is in an early stage in Romania.

Literature review

The bright side of this endeavour is represented by the existence of extensive research already conducted and published in international specialised literature (Rositer 2001: 9-26; Aistrich 2006: 73-80; Rust 2006: 1-3; Ramocki 2007: 18-24; Jackson 2009: 85-98; Wellman 2010: 119-134). These studies deal mainly with competences that a student should acquire during his/her marketing training at university or the differences between the current academic supply and the demands the marketers are required to cope with. The curricula that the students are expected to follow during their university education are also subject to ongoing and heated debates among academics. The comments made about the congruence between the educational supply and the employers’ needs were more often than not critical. In one of their study, Pfeffer and Fong (2002: 78-95) suggest that the business administration faculties operate much like providers who screen and recruit customers to make use of their services whereas their educational supply features a lack of relationship with the real needs of the labour market. With even more caustic remarks, Mintzinberg and Gosting (2002: 33-37) highlight that in faculties where business administration specialists are trained, incorrect or less substantiated concepts are inappropriately being taught to an audience unsuitable for with no interest whatsoever in the field of business administration.

The incongruities invoked between the academic marketing supply and the real needs of the corporate world have aroused, and continue to arouse, the interest of more and more researchers. Well-known specialists from around the world have approached, investigated, researched and debated for a long time these aspects (McKenna 2002: 680-702; Simkin 2002: 120-126; Brennan and Skaates 2005: 77-89; Stringfellow et al 2006: 245-256; Brownlie et al 2007: 395-409; Munch 2008: 16-23; Jackson 2009: 85-98; Wellman 2010: 119-135). Their endeavours highlight the role that educators and trainers play in the academic training of the future marketers. They also attempt to devise the most appropriate ways and means so that student training may be accomplished with more responsibility toward the society. All researchers share the opinion that a better match between the academic supply and the needs of the business environment is a must and one of the main tasks of the marketing educators is to provide appropriate training to any individual who wishes to obtain a marketing qualification.

A “mirror” assessment of the academics’ opinion, as against the employers’ opinion, on the nature and contents of the educational offering meant to ensure the required competences, could take the form of a more balanced investigation and could provide more accurate information on this important topic. Therefore, valid information obtained from both sides—employers and academic world—is the only basis for designing curricula capable of imparting knowledge that combines a high level of academic competences with qualification-specific competences.

The training necessary to apply for a job is obviously a legitimate, all-important objective of any marketing graduate. In the light of the literature reviewed we appreciate that in order to identify those competences that employers regard as the most relevant, the academics and the corporate world should carry out a common assessment of the nature and structure of the academic supply with a view to building up the optimal profile of competences demanded by employers. This undertaking would take the form of a balanced investigation and would provide accurate and valid information that might serve as the basis for designing comprehensive curricula in which the knowledge required by the marketing practice and that imparted in theory should be appropriately intermingled. And, last but not least, the curricula would contribute to the development of marketing-related competences. As shown by Semeijn (2005), the ever-growing interest expressed by international researchers in this topic is generated by the fact that competences have shown to be stronger predictors for job allocation and follow-up training than traditional indicators such as field, grade-point average and BA/MA thesis results.

The technical literature (Boshuizen 2009: 279-404) regards domain-specific competences as the baseline for developing expertise in a profession. Likewise, domain-specific competences facilitate access to jobs (Heijke et al. 2003). The arguments supporting the importance of useful competences in obtaining and preserving a job may be approached from various angles. Thus, a study on the job performance among master graduates with expertise in the domain of business administration (Arts et al. 2006: 387-401) shows that they pay far more attention to information than graduate students regardless of whether the information is relevant or irrelevant. The same study reveals that the latter need at least eight years of work experience before they can accurately distinguish between relevant and irrelevant information.

In contrast, experts focused on structural features and patterns pay far more attention to strategic issues, and the knowledge of graduates is highly organized (Nievelstein et al. 2007: 1043-1064), contributing to achieving high performance in domain-related issues (Feltovitch et al. 2006: 41-66). At the same time, they can retrieve this knowledge very quickly from memory, even under high stress conditions (Woods et al 2006: 973-979). Although such findings are more difficult to measure, they ought to be taken into account in the curriculum design.

An individual’s chances to get a job depend not only on the level of domain-specific competences but also on how well he/she is able to combine them with the so-called generic competences (ability to learn new things, attitude, communication, teamwork, adaptation to unpredictable situations). The specialized literature places this kind of competences, which are useful in many other contexts as well, in the category of key competences, academic competences, or key qualifications (Rychen & Salganik 2001). Their general character comes from the possibility to use them on any particular job, regardless of the curriculum previously followed. They often constitute the baseline for selection of follow-up training. Even if, from a theoretical viewpoint, researchers have intense debates on the need to clearly delineate domain-specific from general competences, in reality the two kinds of competences cannot be acquired separately within a curriculum (Van der Velden 2006). Moreover, authors such as Merrienboer and Kester (2008: 441-456) argue that separating the acquisition of generic and domain-specific competences inhibits the transfer of what has been learned to practice. Consequently, as suggested by researchers, both kinds of competences should be learned simultaneously in a variety of authentic situations across the curriculum. Therefore, we state the opinion that in order

for a student to acquire all competences there must be well-organized curricula whose purpose is to specifically promote knowledge acquisition and development of abilities and integrated professional attitudes.

RESEARCH PURPOSE

Departing from the above-mentioned concerns which emphasize the need of a better coherence between the business administration educational offering and the labour market requirements, a need that has been underlined by authors from around the world, in the present study we set to investigate the Romanian employers' perception of competences acquired by native graduates through the academic marketing training. Moreover, starting from the evaluation of the variables which define the transversal competences and the marketing-specific competences, we set to identify, by means of factor analysis, the main dimensions which define employers' perception of the marketing competences acquired by the graduates whom they have employed.

SAMPLE CHARACTERISTICS

Data collection was made in the Transylvania counties between in October 2010, as part of a field survey. Due to the complex nature of the issues approached, data input was made by interviewers at the office of the investigated organizations. A total of 171 valid questionnaires were collected. Departing from the premise that there are noticeable differences, in terms of objectives pursued, between the organizations' domains, the sample included producers (25.1%), retailers (30.4%), and financial service companies (9.4%), tourist organizations (5.3%), as well as companies which offer other services (29.8%). In terms of the company's start-up year, the sample reveals that most of the companies (82.4%) were established after 1989, 22.8% between 1990 and 1995, 18.1% between 1996 and 2000, 27.5% between 2001 and 2006 and 24% were set up after 2006. The companies included in the survey that were set up before 1989 represent a small percentage of 7.6%.

Another relevant criterion used in the selection of companies was the annual turnover. According to this indicator, the sample is fairly homogeneous, 21.6% of companies recording an annual turnover below 100.000 Ron, 21.1% between 100.001 and 500.000 Ron, 17% between 500.001 and 1.000.000 Ron, 12.3% between 1.000.001 and 2.000.000 Ron whereas the annual turnover of 28.1% of the companies exceeds 2.000.000 Ron.

50.3% of the corporate officers who took part in the survey are administrators, 30.4% general managers and 19,3% marketing responsible. The overwhelming majority of the officers interviewed completed a bachelor's degree (50.3%) or a postgraduate degree (39.8%) while very few of them graduated from high-school (5.2%) or completed an associate's degree (4.7%).

RESEARCH METHODOLOGY

In order to accurately identify the employers' perception of the competences acquired by graduates during their academic marketing training, a series of multivariate data analyses have been conducted. The role of the said tests is to demonstrate the validity, objectivity and reliability of the data subject to analysis. To this effect, we set to determine Cronbach's Coefficient Alpha (α) which measures the internal consistency of the items (variables) which make up a model, a factor or a scale (Peterson 1994: 381-391). By determining the Alpha coefficient, the variables which, by their variance, fail to explain very well the phenomenon being studied can be eliminated from the analysis. The closer to 1 is the value of Cronbach's Coefficient Alpha (α), the more reliable are the data. According to various authors, the calculated value of the coefficient alpha for a set of items must be at least 0.7. However, lower values may also be admitted on condition that they are computed for three items at most (Hälsig 2008: 121; Kuß 2007: 97; Nunnally 1978: 9). By applying the "item-total" correlation, one can determine the

items which, by their removal from the model, may contribute to increasing the value of Cronbach's Coefficient Alpha (α) (Churchill 1979: 64-73). A model's validity can also be verified by means of the exploratory factor analysis conducted in the SPSS Software. By means of it, the volume of analyzed data is reduced, thus highlighting the existing correlations between the observed items. The result thereof is obtaining factors around which are grouped the items (variables) which load together on the intended factors, a fact that accounts for the high percentage of the variance. Each obtained dimension must reflect an as high percentage as possible of the variance of variables, namely, to explain as best as possible the phenomenon being studied (Backhaus et al. 2008: 259-274; Plăiaș 2008: 558-560). Finally, the researcher's task is to properly name the resulted dimensions/factors. The number of resulted dimensions should ideally be as small as possible, as they are thought to be representative of the studied phenomenon. At the same time, each variable should load on a single factor a value greater than 0.4. The reliability of the factor analysis is proven by carrying out the Kaiser-Meyer-Olkin (KMO) test (referring to the homogeneity of the initial items, its recommended value being greater than 0.5) and Bartlett's test of sphericity (the calculation of chi square [χ^2], the number of degrees of freedom [df] and the probability [p] to guarantee results). Finally, the obtained dimensions may be subject to permutation, a process that facilitates correct data interpretation (Bagozzi 1981: 375-381; Kuß 2007: 253-256; Backhaus et al. 2008: 334-337; Bühl, Zöfel 2005: 465-484).

Research Results

As the domain-specific competences that graduates should acquire have been conceptualized, an exploratory factor analysis has been carried out in the first instance on the set of studied items. Five factors have been obtained and Cronbach's coefficient alpha has been applied on the items which load on each of these dimensions. The values obtained for each individual factor have been satisfactory and in compliance with the requirements of the technical literature. Factor one was the only factor for which the variable measuring "the proper management of the negotiation process and conclusion of contracts" has been removed. Thus, the analysis conducted for the remaining items pinpointed a Cronbach coefficient alpha of 0.828 as against the previous 0.823. The Cronbach coefficient alpha was 0.738 for the second factor, 0.809 for the third, 0.777 for the fourth and 0.704 for the last obtained factor.

Resuming the factor analysis for the entire set of selected factors, the next variable to be removed was "proper management of the enterprise's range of performances" as it loaded simultaneously unacceptable values (below 0.4) on factors three and five. A possible explanation for this phenomenon could be a vague wording of the variable as the management of the range of performances could be a component both of the upstream and downstream market. We further resumed the exploratory factor analysis, the results of which are presented below.

Table 1 – Final Factor Analyse

Items (Variable)	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
easy design and implementation of marketing plans and strategies	0,76				
competent managing of marketing studies and research	0,73				
conduct serious analysis of the competition environment	0,67				
are able to properly organize promotion campaigns	0,66				
apply data-base marketing in the relationship with partners	0,51				
have a good command of at least one international language		0,82			
possess developed computer abilities		0,72			
know to handle production stocks			0,79		
know the manner of conducting the cost-benefit analysis			0,73		
possess comprehensive training in material resources			0,69		

Items (Variable)	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
procurement					
display excellent organizational abilities				-0,72	
possess developed abilities to work in a team				-0,67	
possess high analysis/synthesis ability				-0,67	
possess developed communication and persuasiveness abilities				-0,63	
possess well-developed powers of observation				-0,62	
are willing to learn and improve on a regular basis				-0,61	
explore the market efficiently to attract new customers					-0,76
process and analyze the sales data in a professional way					-0,57
manage properly the relationship with dealers					-0,56
maintain properly positive relationships with customers					-0,53
Eigenvalues	6,54	2,01	1,69	1,45	1,02
% variance	32,68	10,07	8,48	7,23	5,12
KMO = 0,834 ; $\chi^2 = 1433,329$ df = 190 și p ****					

Factor extraction method: Principal component analysis, Oblimin rotation with Kaiser Normalization
Source: own research;

A first challenge that we met in our endeavour was represented by the proper naming of the obtained factors. In our opinion, the items that load on the first factor (design and implementation of marketing plans and strategies, competent managing of marketing research, conduct serious analysis of the competition environment, proper organization of promotion campaigns, application of data-base marketing in the relationship with partners), could be regarded as “Marketing knowledge”, as it actually comprises the whole body of knowledge applied within an organization. The second factor could well be named “communication and computer skills”, which represent extra knowledge with significant impact on the marketing practice. In our opinion, the items loading on the third factor make up the body of knowledge that an organization should possess in relation to the upstream market. Therefore, we believe that the third factor could be properly named “procurement knowledge”. The fourth factor, “management and negotiation skills”, contains elements that contribute substantially to graduates’ personal and professional development. Finally, the fourth factor contains marketing knowledge about an organization’s upstream market. Thus, we believe it should be named “skills in market analysis and maintenance of relationships with its players”. Viewed from a different perspective, of outstanding importance is the manner in which the dimensions obtained within the exploratory factor analysis interact on each other. The multiple regression analysis conducted on the factors highlighted by the exploratory factor analysis shows that marketing knowledge has significant influence over communication and computer skills. As marketing is, by its nature, an open activity and more and more computer applications have been developed for the marketing practice, this correlation is accounted for by the fact that marketing has become a driving force behind specialists’ availability and performance in terms of technical and interhuman communication. We could also take into account the use of computer equipment for the collection of marketing data and information.

Marketing knowledge → communication and computer skills		0,156*
Procurement knowledge → communication and computer skills		0,109 ^{n.s.}
Skills in market analysis and maintenance of relationships with its players → communication and computer skills		-0,035 ^{n.s.}
Model fit		
F	3,504***	R ² adjusted
		0,042
Durbin-Watson		1,955
Legend		
*p<0,1	**p<0,05	***p<0,01
****p<0,001	n.s. - insignificant	

Conclusions

According to our findings, respondents expressed a favourable opinion about the level of training of employees' engaged in general marketing activities and in specific activities related to the upstream market. A favourable opinion has also been expressed concerning the generic competences, such as computer or linguistic skills. Respondents expressed a less favourable opinion about the level of training of employees who carry out marketing activities in relation to the downstream market and about a range of skills related to their individual and professional development.

The application of the factor analysis on the 20 variables that we deemed relevant for the evaluation of the variables that define transversal and marketing-specific competences allowed us to identify five dimensions which were named "marketing knowledge", "communication and computer skills", "procurement knowledge", "management and negotiation skills", and "skills in market analysis and maintenance of relationships with its players". As the analysis has shown, these dimensions mirror the complexity of the marketing activity, touching on upstream and downstream market-related skills as well as management and communication skills.

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A QUALITATIVE RESEARCH REGARDING THE MARKETING COMMUNICATION TOOLS USED IN THE ONLINE ENVIRONMENT

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Starting from the meaning of the communication process in marketing, the authors try to identify its role in assuring the continuity of the management process in what concerns the relationships between all the partners of the company, on the long term. An emphasis is made on the role of online communication and its tools in relationship marketing. In order to validate some of the mentioned ideas the authors have chosen to undertake a qualitative marketing research among the managers of some Romanian tourism companies. The qualitative part of the study had as purpose the identification of the main tools which form the basis of the communication with the beneficiaries of the touristic services, of the way in which the companies use the online communication tools for attracting, keeping and developing the long term relationships with their customers in the virtual environment. The following tools have been analyzed: websites, email marketing campaigns, e-newsletters, online advertising, search engines, sponsored links, blogs, RSS feed, social networks, forums, online discussion groups, portals, infomediaries and instant messaging. The chosen investigation method was the selective survey, the research technique – explorative interrogation and the research instrument – semi structured detailed interview, based on a conversation guide.

A very important fact is the classification resulted after the respondents were requested to mention the most efficient tools for attracting customers and for maintaining the relationships with them. Although the notoriety of the online marketing tools is high, there are some tools that are known by definition, but are not used at all or are not used correctly; or are not known by definition, but are used in practice.

The authors contributed by validating a performing methodology of qualitative research, a study which will open new ways and means for making the online communication tools used for touristic services in Romania more operational. It is to be mentioned that the chosen domain of application has not yet been researched within the national literature.

The qualitative research results will form the basis for a quantitative study among the consumers of touristic services in order to identify their opinion in what concerns the usage of online marketing tools by the tourism companies in maintaining the relationships with them.

Keywords: Relationship Marketing, CRM, Online Marketing Communication, Market Research

JEL Classification: M31

Introduction

The new communication media have registered an exponential development among the delivery - reception methods of the information between people. Marketing which is viewed as the analysis and action on the market has not remained immune to the major challenges determined by the occurrence and development of the virtual communication – based on the internet applications. The strategic vision, that marks the evolution of contemporary marketing, assures a long term

relationship between the companies and their market (Pop 2006: 36). The efficient administration of the companies moves the central focus of the marketing action towards assuring the continuity and administration, on a long term basis, of the relationship with all the partners involved in this process.

Having as target to make this activity continuous and bivalent, the company assures the success of the messages it wants to send and receive. In the modern business environment the online interaction has different multiple advantages starting from smaller costs, time efficiency for the participants, a secure transaction framework and a friendly communication environment. The knowledge and most important the usage of the online communication tools in what concerns the management of the relationships with all the stakeholders of a company must be monitored permanently by using the marketing research means.

Marketing communication facilitated by the online tools

The literature referring to the new marketing communication tools is one of the most developed in the field. A large number of the analyzed aspects start from the communication mechanism and concentrate over the management of this process according to the particularities that the digital economy imposes over the speed of transmission, delivery and responses of the recipients to the messages with which they are “overwhelmed”. As a consequence, the term of *online marketing* is defined more clearly (Meyerson and Scarborough 2008), which not only covers the communication area, but also focuses on it. The major changes that affected the technological, legislative, social and economic environment (Smith and Taylor 2004: 216 and next) generate an entirely new face of the communication act.

The Romanian reader can benefit of a systematic approach of the marketing aspect in the digital era by having access to the translated reference books in the field, such as Kotler et al. or Gay et al. (Kotler, Jian and Maesincee 2009; Gay, Charlesworth and Esen 2009). It is requested to diminish the role of internet into communication due to the fact that this remains mainly a communication method in which “... the value is represented by the message not the nature of the transmission” (Gay, Charlesworth and Esen 2009: 389). The customization, the distribution of the message or the access at request of the user, makes it easier for the message to be personalized. This fact transforms the new tools of online communication in real relationship marketing tools, the later having as purpose a long term relationship between all the stakeholders and the products, services or brands of an offering company (Gummesson 2008: 36-40).

Relationship marketing, in its turn, also faced at the beginning of this millennium new developments creating a real interface for a highly anticipated field, the one of the demand holder’s reactions - representing the *network marketing* (Schebesch, Pop and Pelău 2010: 37-45; Bruhn and Koehler 2010; Roullet and Droulers 2010). All these developments reflect a significant change of the relationship between the participants in the selling and buying acts, their transformation from receivers and senders in *partners* in the process satisfying the of needs. The implication of the consumers in the production and distribution of the tangible goods and services, which satisfy their needs, becomes an important step in the entire process. Communication no longer belongs only to the one that offers, it sometimes even takes place without involving that person, having unexpected effects on the act of selling and purchasing (Trusov, Bucklin and Pauwels 2009: 90-102).

Once the global coordinates of the online strategy are settled, it is necessary to carefully select the communication and promotion tools because the moment a user accesses a company’s website, he / she can be an actual or a potential customer.

The online marketing mix (Adler 2010: 14) includes plenty of components and requires the following steps: *planning*, *implementation* and *control*. During the *planning* phase there are established the tools that will be used and the channels through which they will become

operational. The most well known and used tools are the: websites, emails, e-newsletters, search engines, sponsored links, blogs, RSS feeds, social networks, forums and online discussion groups, portals, infomediaries and instant messaging (Pantea and Vegheş 2008: 202). The *implementation* phase presumes that, once the tools have been chosen, decisions related to the design, characteristics and frequency of use must be taken. During the final part, the *control*, the marketing activities are monitored carefully, interfering if necessary. During this step the results can be partially measured, and if necessary, the instrument can be withdrawn. Finally, the results will be measured and conclusions will be drawn for future actions.

Methodological notes

In order to validate some of the ideas mentioned above, it has been chosen the organisation, development and interpretation of the results of a qualitative research among the managers of tourism companies from Romania. The term of *tourism company* will be used from now on in order to refer to any travel agency / tour operator or touristic services provider, no matter if it is a hotel network (national or international), hotel, guesthouse, transport company (national or international), air travel company, railway or maritime company. The touristic services represent one of the services' domains that are well fitted for the introduction and generalization of the online marketing communication tools. The qualitative part of the research has focused on identifying the major tools that form the communication basis with the consumers of touristic services; the method in which the tourism companies from Bucharest use them or intend to use them in the future and on stating hypotheses regarding the way in which the potential customers are attracted and how the relationship with them is maintained.

The *four objectives of the research* (O1-O4) have focused on identifying the major virtual tools that the travel agencies use in order to attract potential customers, on the communication with the former or actual consumers of touristic services, on identifying the way in which the respective companies use the online tools and also on the reasons they are chosen for identifying their usage. The researched online marketing tools were the following: website, e-mail marketing campaigns, e-newsletter, online advertising, search engines, sponsored links, blogs, social networks, forums, online discussion groups, portals, infomediaries and instant messaging.

The chosen *investigation method* was the selective survey, the *research technique* – explorative interrogation and the *research instrument* – semi structured detailed interview, based on a conversation guide (Pop 2001: 86-87; Cătoiş et al. 2002: 207). The period when the research took place was 7-25 February 2011.

The main hypotheses of the research:

H1. The companies operating on the tourism market in Romania use virtual marketing tools in order to attract potential customers and to maintain the relationship with the present clients.

H2. The majority of online marketing tools are known and used more and more by the companies operating on the tourism market in Romania, implicitly by their managers.

H3. The tourism companies use / combine certain online marketing tools in order to attract potential customers to their websites and also some online marketing tools for maintaining and developing the relationship with them, the majority of the respondents being satisfied with the results obtained after using the tools.

H4. In the future, the marketing strategy of the tourism companies will also include online actions for attracting customers and for maintaining the relationships with them.

It has been achieved the interviewing of *18 representatives of tourism companies* (10 representatives of travel agencies, 4 hotel representatives, 3 from transportation companies and one airline company representative), these companies have an updated website and the headquarters in (or also in) Bucharest.

The *interview* had an average length of 40 minutes. The registration of the answers given by the respondents has been done by recording on magnetic tape, in case of 16 companies, the rest expressing their will to answer in writing to the questions from the interview guide.

The working tools that have been used to *analyze and interpret the data* obtained from the interviews are: *content analysis* (Bardin 1977: 43 și next), *semantic differentiation* (Cătoiu et al., 2002: 152-154) and *Likert scale* (Plăiaș et al. 2008: 361-363).

Main results obtained and their implications

The presentation of the main results, obtained after analyzing and processing the data, will be done taking into account the objectives and hypothesis that formed the basis of the research:

O1. Identification of the relational means and tools used by the travel agencies and touristic services providers from Romania to relate with their customers;

In case of the majority of the respondents there have been noticed different views in the answers and the main problem raised by all was referring to the effects of the actual economical-financial crisis on the economy, which brought major changes in the strategy of the companies and in the way they are allocating the afferent communication budget. All the interviewed tourism companies have a website where they present their offers, the details referring to the touristic services they provide; the website being unanimously considered very important for *attracting customers*. Other means of attracting customers mentioned by the company representatives were the commercial messages sent by email to the database with customers (natural or legal persons), the company newsletters, the sponsored links and also the presence of the company on social networks.

After attracting customers, the majority of companies consider important to retain these customers, *keeping and developing the relationship*, which they have with these people who benefitted from their offered services. One tool mentioned by all companies as being used in order to relate with the customers was the newsletter, which helps them inform the customers regarding the new offers, promotions, projects or new events, contests or surveys. The databases for the newsletters are made mostly by legal persons, being harder to create a database with natural persons. In this category, the companies have also mentioned sending emails with a commercial content, the presence on the social networks or the presence of a chat window on the website which gives the customer the possibility to contact directly a company representative. Based on these answers, H1 hypothesis is validated.

O2. Identification of the degree to which the online marketing tools are known and used by the representatives of tourism companies for relating with the customers;

To a very high proportion all the company representatives have stated that they know all the online marketing tools. A few of them stated that they do not know for sure what means email marketing and the difference between this tool and the newsletter; RSS feed is rather known by its name rather than the way it is used; the instant messaging was another unclear topic for some and this is why there were mentioned examples such as “Yahoo Messenger”, “Skype”, the chat window, etc. The H2 hypothesis is shown as being true.

O3. Determine how travel agencies use online marketing tools and the degree of satisfaction obtained after their employment;

The respondents were asked *how and for what purpose* they use each of the online marketing tools. Based on the answers there can be seen an alignment of the views regarding the purpose and the usage methods of the online tools: *the website* is in general the first contact of an internet user, potential or present customer, with the company, in the virtual environment; this is why it is very important to manage it correctly and to keep it functioning in a proper way, the website being used for presenting the company, its offers and important news; *email marketing and e-newsletters*: these two concepts have been confused a lot by the representatives during the

interviews, in terms of their purpose and of the way they are used; thus based on the answers of the respondents, we can state the fact that there is a disaccord between the theoretic definition of the concepts and their practical use by the tourism companies; though both tools have been recognized by the company representatives as being used for attracting customers and also for maintaining the relationship with them; *search engines*: all the respondents consider vital for their company to be shown among the first results after generating a search, their website to appear on the first pages of the search engines after the customers introduce some key terms; *sponsored links*: all their users (one third of the respondents) declared themselves to be very satisfied with the number of viewers attracted to the website by the sponsored links that appear mostly on the search engines; *blogs*: the providers of tourism services do not have company blogs, but intend to use this tool in the future; *RSS feed*: none of the respondents mentioned this tool among the ones their company is using; *social networks*: no matter if it was a travel agency or a touristic services provider, all of the respondents acknowledged the growing importance of the social networks; *forums and online discussion groups*: none of the participating companies has an integrated forum in the company's website, only one third of the respondent companies offer their customers the possibility to add comments on their websites; *portals and infomediaries*: only a few of the company representatives that stated their opinion believe that these tools can help in attracting customers, but less for maintaining the relationship; *instant messaging*: all the company representatives that use instant messaging stated that they use this tool for attracting new customers and for maintaining the relationship with them, though only approximately 30% of the customers who have benefitted from touristic services contact the company afterwards.

All the company representatives declared themselves *satisfied* and *very satisfied* of the results obtained after using online marketing tools in order to attract customers or maintain the relationship with them; hypothesis H3 is confirmed.

O4. Identification of the companies' future steps / strategies in terms of the relationship with their customers;

The same as it was until now, in the future the marketing strategies will have as a core concept the customer and all the company's actions will take place around him. Managing the relationships with the customers will be a mix between the attraction and loyalty methods using traditional tools, the well established online ones and also the "new" online tools (social networks, blogs which might be used to interact with the customers). Hypothesis H4 is validated, the respondents being certain about their need to maintain the relationship with the customers in the online environment, without ignoring or substituting the offline actions.

Conclusions, limits and future directions of research

As a result of the interviews it has been established that from the online marketing tools presented to the respondents, only three of them are used just for *attracting customers* (the search engines, the online advertising and the sponsored links), the others being used in the same time for *attracting customers* and *maintaining or developing the relationship* with them (website, email marketing, e-newsletter, blog, RSS feed, social networks, forums, online discussion groups, portals, infomediaries and instant messaging). Of a major importance is the classification resulted after the respondents were requested to mention the most efficient tools for customer attraction and maintenance of the relationship with them. As a result, the most efficient online marketing tools for *attracting customers* are: company's website, search engines, sponsored links, e-newsletters, email marketing, social networks, online advertising; and for *maintaining the relationship with the customers*: the website, e-newsletters, email marketing, social networks and instant messaging.

Despite the fact that the notoriety of the online marketing tools is high, there are some tools that are not known as a concept, that are not used at all or not used properly; or are known as a concept, but used in a wrong manner in practice. Though the term of infomediaries is specific for the tourism market, the ones in the business do not know its definition, but they know how it works. The term of instant messaging was also not very clear, being necessary to give examples; RSS feed tool is known better by name rather than implementation. The biggest problem is the confusion that appeared during the interviews between two tools highly used by the companies, email marketing and e-newsletter. The difference between these two concepts was presented in a previous work of the authors (Pantea and Pop 2010: 738-739).

The exploratory research is recommended in case it is wanted the better understanding of a certain phenomenon, in comparison with the descriptive or causal research which is chosen for testing specific hypotheses or for studying the differences between variables (Malhotra and Briks 2007: 201 and next). *The limits* of the present qualitative research are represented by the fact that it had an exploratory character aiming to understand what happens inside the studied field and to study the social phenomena without “explicit outcomes” (Schutt 2009: 344 and next).

The results of the present qualitative research will form the basis for a quantitative study among the consumers in order to determine their opinion related to the way the online marketing tools are used by the tourism companies.

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THE COMPETITIVE POSITIONING OF THE SME'S ON THE MARKET

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Having in view at the same time the possibilities identified for the development of the competitiveness of the Romanian SMEs in order to face the new challenges and the use of the opportunities to operate on the inner market as well as the on the level of the European Union, the strategy has in view a series of measures and actions that are connected to a series of priorities. These priorities and related actions were established on basis of the present-day situation of the SMEs carried out by the ANIMMC. According to the position of the SMEs on the market, these can choose different types of marketing strategies with the aim of attaining in a certain period of time of the objectives established and at the same time their consolidation on the market.

Key-words: SME's, competitive, integration, marketing strategies.

Cod JEL lucrare: M31

Introduction

The market of the SMEs has a distinct and complex character. The objectives and motivations of the SMEs are significantly different from those of the large companies, their objective strategies ranging from their wish to develop till the simple ensuring of the incomes of stable cash-flow. Frequently, in the case of the SMEs, the need to solve current problems – solving clients' requests and maintaining competitiveness – shadows the strategic „image” perspective. The providers have to concentrate upon adapting their products and services to these special needs and to support the SMEs to identify their essential problems they have to cope with.

According to a study ordered by the Cisco Systems and carried out in the month of October 2005 by the marketstudy company Caleman parkes, because of the large number of competing companies – SMEs on the European market, it isn't surprising at all that these type of companies state as their prime priority the preserving of their competition position they presently hold.

Having in view that the problems of competitiveness are generated by the small enterprises as well as by the large ones, the lack of resources may seriously hinder the capacity of the SMEs to face the competitive pressures. The wish to counter and avoid competitiveness, is really to be considered the permanent reason of “insomnia” of the SMIs, being considered to be the main catalyst of investments in technologies in the present as well as in the near future.

One of the aspects of foremost importance for the SMEs is the choice of the products or services that may assure maximum commercial advantages.

1.The SME's in the present-day integrationist trend

The attentive analysis of the issues of the SME's in Romania in the preaccession period allows a series of conclusions of generalising character.

First of all we note the continuous fragileness of the positions of the SMEs on internal as well as on international level, compared to the large enterprises. The whole activity of the ANIMMC shows the process of improving awareness of some support measures for the SMEs, for there is the danger of their disloyal elimination from the market, this fact bringing about a very serious social and economic impact. The thorough and very diverse activity of the ANIMMC, activity

that in fact is the result of the threats the SME's are confronted with, is, by itself, a measure of this reaction, of this threatening that makes it necessary.

Moreover, the activity of the Agency unfolds in the general framework of the Chart of Lisbon, therefore the problem of the SMEs is not a Romanian problem, but a European one, and what is more, we may state that it is a problem of the extension of the EU. Generalizing it is a problem of any integrationist phenomenon, and inclusively that of the process of globalization. The mechanisms by which the competitive position of the SMEs is continuously, systematically and objectively raised, in competition with the large enterprises, are the following:

- The scale economies. This refers to the well known phenomenon, but whose complex effects and dynamics for long periods are, probably scarcely studied, through which the mass product is competitively favoured in front of the product processed in small quantities.

As long as we discuss the theme of the scale economies only in the terms of the quantity and of the unit price, the phenomenon has a direct, mathematical explanation. Thus, the independent costs of the production volume (research-development, promotion, marketing) being the same, no matter of the quantity processed – the share of these costs in the unit price decreases as the production increases, because they are distributed at a larger number of products.

The approach may be extrapolated: a small or a middle size entrepreneur has generally the possibility to optimize his production by the short-term optimizing methods, by adapting the labour force to the fix existing capital. Even if he has the necessary knowledge for the procession optimizing for long-term, through establishing of the ideal relationship between the costs with the labour force and those with fixed capital, he usually doesn't have the necessary liquidities to make these procedures operational, especially from the point of view of enlarging the fixed capital and cannot obtain these liquidities but only through cost generating credits and supplementary risks.

From our notes it is clear that the scale effect may be extrapolated on-goingly to economic and extra-economic phenomena, deforming the competition equity as the result of the competition depends less and less on the relative merit of the competitors but more and more on the dimension of the resources they have at their disposal.

For example, one of the factors entirely associated with the initiative, that is, the risk, is also subject to a scale effect: the implication of the same volume of capital in an enterprise with the same risk factor may be discouraging for a small entrepreneur, who risks his entire capital into that enterprise, and the attraction for a large one, who risks only a small percentage out of his available capital.

We may also speak about a whole series of scale phenomena, economical or extra-economical, in which the size favours success: scale propriety, scale notoriety, scale net-work-communication a.s.o.. It is about situations in which the entity spoken about – propriety, notoriety, communication – has reached such dimensions that it self-generates and maintains itself without effort.

Scale phenomena and particularly scale economies should be regarded with discrimination from the perspective of competition and competitiveness. On the one hand, they normally represent the result of accumulating in time that had been generated by a superior competitiveness, under the conditions of a loyal competition. On the other hand, at the moment of analysis they decorrelate the economic result of labour and initiative, favouring the owner of large capital compared to the small and middle size entrepreneur.

- Assymetries – These can be material assymetries- the bigger economic power of the enterprise, that makes it more attractive as a client, more feared of as a competitor a.s.o. – then the institutional assymetries- the increased lobby capacity of the large companies etc – and maybe the most important ones the information assymetries. All these systematically defavour the SMEs in the so-called free competition on the market.

All these defavour systematically the SMEs in competition with the large enterprises, leading to what we call perfect competition to naturally transform into monopolist competition, this later on into oligopoly competition and than into monopoly, that is – into the situation where there is no more competition between the producers, but a competition between the unique producer and the consumer himself.

2. The market strategy of the enterprise

The necessity of adapting the company to the social-economic environment in which he unfolds his activity, represents an important condition for the development of an efficient activity.

This capacity of adaptation measured by the synergy of the enterprise depends on the material, human and financial power that it possesses as well as on the way it is carried out compared to the market. Every action of the enterprise finally is the result of the encounter between some needs of consume with the knowledge to satisfy them at the best-ever known level, thus, practicly, out of the direct confrontation of the demand with the offer. In order to accomplish this aspect it is of outmost importance for the enterprise to carry out two very important things:

- to study and understand the market it acts on
- to adapt its activity in such a way that it can be able to put into value the best market offered oportunitues (avoiding at the same time the possible dangers).

In order to carry out these things it is necessary to have a strategic vision over one's own activity, a vision that is more and more imposed by the new situations in which he develops his activity. It is about the analysis of evolution in time and space of the inner resources of the Enterprise (organising, technical and human) as well as of the external ones to it (competition in the field of providers-suppliers and of the clients, the modification of technologies, the modification of the leadership a.s.o.) The identification and materialization of the major objectives of the enterprise, around a strategical vision, as well as the strengthening of the postion on the market, the growth of the turnover, the improvement of the efficieny performances, a.s.o. - represent objectives of marketing policy of any economic organization.

3.The importance of positioning as a strategical option

The positioning is a basic element of the strategic planning of marketing, because any decision referring to spoitioning has direct and immediate implications over the whole marketing mix and at foremost it represents a communication strategy.

Positioning is a competitive strategy that places it in the contextual frame of the international marketing essence. Positioning should be competitive because the firstmost requirement is the differentiation among competitors on basis of a competitive advantage. This advantage may be obtained to the extent in which the enterprise grants its clients a superior value compared to that of the competition.

In order to properly solve the specifical problems of each aspect of positionin on the target markets, the SMEs have to use the relevant criteria and variables step by step in several successive phases. For some of the SMEs the choice of position is relatively easy. Others may face difficulties and end up by being positioned on the same positions with other competitors. In such situations, the strategies have to identify and create a portfolio of competitive advantages attractive for the target market and later ot communicate them and to let them be known in a convincing manner. From this point of view, that of competitiveness, the process of positioning includes three phases, respectively:

- the identification of the possible competitive advantages of the enterprise or brand (product);
- deciding over those that have to be stressed;
- the concretization (exact stating) of the concept of positioning.

These phases focused on the competitive differentiation may be included in a larger process that allows the highlighting of the aspects that facilitated the approach focused on the competitive advantage.

Conclusions

According to the position of the SMEs on the market, these may express their option for different types of marketing strategies towards which they should face to. These marketing strategies have in view a wholeness of „long-term” actions that move human resources as well as financial, material ones of the SMEs in order to attain in a given period of time the traced objectives and implicitly their consolidation on the market. It is implemented with tactics, techniques and of a very well determined instrumentation.

The marketing strategies have a pronounced diversity and are classified according to multiple criteria. The applying of a strategic variant or another stays at the choice of the management team of the SMEs. It is important to express option for a proper “recipe” for the possibilities of the enterprise and of the given moment. Because the non-adequate application of a strategy may destroy the whole structure of the business built with toil and sacrifices, sometimes for whole long years.

The strategic axis of an enterprise can be modified from one phase to an other. But when the company takes action in a turbulent surrounding, where unforeseen events may happen which do not comply with the usual risk calculus, the strategic alternance becomes a common fact.

These strategies investigate and find the ways of placing the offer of the small and middle size enterprises, in accordance with the necessities, preferences and perceptions of the envisaged groups of clients, with the demands of the target market as a whole that also include the competitors with their resources, experience, the components and competitive advantages of the company which they use in order to take the selected position.

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EUROPEAN POLICIES FOR THE STIMULATION OF THE DEVELOPMENT OF SMALL AND MIDDLE SIZE ENTREPRISES

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Europe's small and medium-sized enterprises are the engine of the European economy and the main drivers for achieving sustainable growth and more and better jobs. At EU level, the European Commission has developed a comprehensive SME policy, which aims to ensure that Community policies and actions are small-business friendly and contribute to making Europe a more attractive place for setting up a company and doing business.

Keywords : SME's, European Commission, financing opportunities, private and governmental policies.

Cod JEL lucrare: M31

Introduction

The Small and Middle Size Enterprises represent the engine of European economy and are also the most important driver of new jobs and economic growth. The European Commission through its actions, sets the needs of the small enterprises in the center of its policies. The European Commission develops and applies a variety of political measures especially conceived to support the SMEs in Europe. These policies have in view to create those conditions on which the SMEs can be created and be prosperous. But the SMEs will have the main role, if the EU follows its objectives of acceleration of the economic growth and creation of more and better jobs.

The new strategy of the Commission in the field of the SMEs aims to apply the principle „think small first” that allows the improvement of the business environment for the SMEs, the reduction of administrative costs, the simplifying and accelerating of the compulsory procedures, the improvement of the access of the SMEs to the markets and the growth of their competitiveness. The member states have taken responsibility, through the European Charter for the Small Enterprises, to develop a favourable business environment for the SMEs. One of the main objectives of the Community action is to allow its member states to benefit of the experience of their homologation and make use of its policies. This way everyone may become aware of the good practices and can apply them in his case.

The Commission has initiated a process of reduction of the bureaucracy the firms are confronted with and revises the existing community legislation, aiming to eliminate the unuseful administrative requirements. Also the member states are asked to follow the example of the Commission. According to the estimates; this exercise may reduce the administrative costs by 25%, costs that are presently paid by the SMEs.

The new Community policy on small and medium-sized enterprises (SMEs) creates a more coherent, pragmatic and horizontal framework for these enterprises. It aims to unlock the vast untapped potential of SMEs to create growth and employment within the European Union. SMEs will become more competitive, due to the promotion of entrepreneurship, improved access to internal and external markets, simplified Community legislation, improvement of their growth potential and an effective partnership with SME stakeholders.

Small and medium-sized enterprises (SMEs) make a major contribution to growth and job creation in the European Union (EU). This is why the new policy on small and medium-sized enterprises (SMEs) creates a more coherent, pragmatic and horizontal framework for these enterprises.

Promoting entrepreneurship and developing an environment favorable to SMEs will allow them to become more competitive. SMEs are very diverse, and consequently have different needs to become more competitive. Some are active in vast markets, others in local or regional markets. If by definition all SMEs have fewer than 250 employees, some are micro-enterprises, others are family SMEs. In order to unlock the growth potential of SMEs as a whole, policies and action to support them need to reflect this diversity.

The success of this new policy will depend on the effective involvement of all SME stakeholders, national, regional and European, public and private.

1.Policies in the field of the SMEs

The SMEs are responsible for a great proportion of the economic and vocational activity in Europe. This governmental policies must be adopted that should contribute to the stimulation of the development of the SMEs.

1.1 Presentation of the main financing opportunities granted to the SMEs

The Capital is essential for the start of development of a company, but to find out the most adequate financing form is very often a major obstacle for the small and middle size enterprises. The investors and the banks often avoid paying the initial costs of foundation of the SMEs due to the implied risks. Sometimes the entrepreneurs do not entirely understand the concerns of the investors or the banks, fact that makes it difficult to find the necessary financial support. Presently, the European Commission is implementing a number of programs especially granted to the environment of financial improvement of the SMEs in Europe.

The European Union offers support to the small and middle size enterprises in Europe.

This may be found under different forms, like subventions, loans and in some cases –guarantees. The support may be offered directly, in the forms of the programs managed under national or regional level - as the Structural Funds of the European Union. Also, the SMEs may benefit of a variety of non-financial consultancy measures offered as programs and services of support for enterprises.

This tool aims to present the main community programs existing for the SMEs and contains a short description as well as the main sites of each program.

The European Commission collaborates with national authorities at the improvement of the financial environment for SMEs. Through the organization of experience interchanges and good practices between the national governments, the Commission has allowed many member states to bring concrete improvements to the financial environment for the SMEs. Also the Commission has taken floor in the dialogue between bankers and SMEs in order to identify and reduce the main obstacles that the small enterprises may come across when looking for a financing form.

1.2 An adequate legal framework for the stimulation of the development of the SMEs.

Presently the European Union undertakes huge efforts to reduce bureaucracy inside the existing legislation as well as in the legislative propositions. For the beginning, the Commission has rejected 68 projects of laws in 2006 and other ten projects in 2007. For the beginning the Commission works at the diminishing of the number of laws that has in view the simplifying of the SMEs' activities. These include the reduction of the reporting imposed by the accounting regulations, the reduction of costs for the trans-border taxes and the simplification of the customs procedures. We have to assure the fact that the new laws do not make the activity of the SMEs more difficult but have in view their needs.

This is a part of the principle “think small first”, introduced by the Commission in 2005, once with the presentation of the new policy regarding the SME's. All the legislative propositions have as object of a thorough verification regarding their potential impact on the SMEs.

1.3 Guarantee of the loyal competitiveness

A unique competitive and open market is the best guarantee offered to the SMEs, that follow to increase the effectiveness and their innovation potential. Thus the EU has introduced a powerful policy in the field of competitiveness which should protect the SMEs against the non-loyal competitions of other economic agents. Without neglecting its engagement for a free competitiveness in Europe, the Commission updates its regulations in order to encourage the national and regional authorities to further redirect the public subventions. The Commission will continue to reduce the controversial actions and those which modify competitiveness in favor of the national champions and in change to sustain those measures that contribute evidently to the intensification of growth and job creation.

Because the European SME's have the biggest growth potential and of new job creation, the small firms will be the first ones to benefit of these measures.

A particular field the Commission is concentrated upon is the prevention of abuse of dominant position. The large firms that exploit its power of market in order to eliminate the smaller competitors are implicated in anticompetitive practices that are forbidden by the Community legislation. The Commission grants a special attention to the complaints made by the small enterprises that reflect such situations.

Also, such fusions are forbidden that create or consolidate a dominant position, impeding such potential abuses that may come afterwards. Generally the mergers which imply SMEs are not object of a Community control, because these cases do not have a European dimension. However, some arrangements between the large companies can damage the competitors, against the smaller enterprises. The most familiar examples are the arrangements regarding the prices or the cartel in which the companies establish as commonly agreed the level of prices, thus the clients cannot benefit of the competition between the suppliers in order to obtain lower prices.

On the other hand the arrangements between the SME's are to a high extent exempted from the interdictions stipulated in the Community treaties.

These should be able to protect from the competitors from abroad who do not observe the rules. The objective of the European commercial protections tools TDI is to protect the European companies from the commercial un-loyal practices from the third countries, as well as against the dumping or subventions that negatively transform the market. Also, these instruments protect the European producers in case of some strong and instant waves, of unforeseen import. The antidumping anti-subvention measures aim to reestablish of an efficient and loyal competitiveness on the inner market. These instruments have an important role for the SMEs. The Commission has initiated communication and counseling actions especially by the Euro-Info Centers wanting to assist the SMEs in their work with these instruments.

Also an assistance office was launched for the SMEs. At the same time the Commission views upon the third countries in order to verify whether these use the commercial protection instruments legally and correctly, directed against the EU. In case needed the Commission intervenes to guarantee the access of the European companies on the third country markets many representing a problem to the SMEs.

Conclusions

The development policies of European level aim to improve the existing situations, to eliminate the existing disfunctions, the balancing of the future development and consolidate the developing directions.

According to the specific situation on local level the, development policies may be separated as:
- policies based on opportunities that allow the contractation of weaknesses - combinations that support strategies directed towards change;

- policies based on opportunities sustaining strengths – combinations that sustain offensive strategies;
- policies based on weaknesses and threats – combinations that support defensive strategies;
- policies based on strengths and threats – combinations that sustain diversified strategies.

For each one of the given policies development programs are proposed, as general formulas, which at the stage of the action plan will turn into groups of projects, whose accomplishment will lead to the implementation of development policies.

The success in solving the problems of economic development of the SMEs and of implementing the adopted policies can be attained only through collective efforts of the governmental, private and non-governmental sectors.

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INVESTIGATING THE PATIENT SATISFACTION WITHIN ROMANIAN PUBLIC AND PRIVATE HOSPITALS

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Although it is not commonly accepted within healthcare services industry, the importance of marketing is more and more recognized nowadays by the organizations activating in the field. Current perception resides in a series of factors as: ethical aspects involved in the delivery process; special characteristics of the market; particular profile and behavior of the consumers of healthcare services and probably because of the inadequate understanding of the marketing role in the life of an organization. A deep analysis in the field of healthcare services will emphasize not only its complexity, but also its interdisciplinary feature under many aspects, as it is an area where many fields of interest are intersecting, both economic and social. It also reveals a particular field of study with many particular features - considered a sensitive field (Popa and Vladoi 2010: 232). Generated using the SERVQUAL model, the data presented in the paper are the result of a quantitative research designed to measure and compare the patient/client satisfaction degree for public and private medical services provided by the Romanian hospitals. The aim of the research is to identify and to measure the gap that appears between the patient/client' expectations and perceptions regarding the delivered services; to identify the potential profile of the private Romanian hospitals' clients regarding the demographic features and also to pin-point correlations between the image created in the mind of the Romanian patients/clients and the type of medical services (public or private) they were using. We consider that the results of this research are valuable for the managers of the medical units in order to initiate series of actions aiming to improve the quality of their services and, as a result the patient/clients' satisfaction degree. Later being one of the most important performance indicators of an organization that activates in a highly competitive business environment. We also consider this research may be useful in the process of improving the quality of the medical services in Romania, which must be a priority for any medical units' management and for the society as a whole. Present paper intends to lay foundation for future research, tailored to correlate the quality culture for the Romanian hospitals and the satisfaction degree of their patients/clients.

Keywords: relationship marketing, patients' satisfaction, public and private medical services, Oradea, Romania.

JEL Classification: M31, I11

1. Introduction

The present paper is mainly focusing on presenting the results of a research whose aim started from the idea that satisfaction represents a major vector that leads to customer retention and loyalty (Chiou and Droge 2006: 613). Details regarding the research aim and methodology were the subject of article entitled *Measuring Patient Satisfaction within Romanian Healthcare Services – a Relationship Marketing Approach*, included in the program of the 15th IBIMA

Conference *Cairo, Egypt 6-7 November 2010*. Below is the summarized essential features of the research methodology of the above paper.

The purpose of this research was concentrated on analyzing the satisfaction degree as perceived by patients within public and private medical systems from Oradea, Romania; on analyzing discrepancies between levels of expectations and perceptions on the 5 dimensions which were taken into account to measure satisfaction level, and on identifying a potential customer profile for private medical services, starting from key demographic characteristics (Popa et al 2010: 842-846).

The paper objectives are:

- Quantify discrepancy between expectations and perceptions regarding patients' satisfaction;
- Identify customer's profile for private medical services starting from key demographical characteristics;

Referring to the research methodology, in order to measure patients' satisfaction degree regarding quality of medical services, we use SERVQUAL model, developed by Parasuraman et al. in 1985. The five dimensions of the SERVQUAL model, exhibited on a double 22 scale items, are the followings (Parasuraman, Zeithaml and Berry 1988; Parasuraman, Berry and Zeithaml 1991; Bruhn 2001: 82-83): **Tangibles** – physical/tangible environment acceptability: physical facilities, equipment, image/personnel posture; **Reliability** – reliability/trust/honesty: capacity to deliver promised service in a consistent and correct manner; **Responsiveness** - availability/receptivity: willingness to support and offer a prompt service; **Assurance** – competence/certainty: personnel knowledge and skills, degree of inspiring trust and responsibility; **Empathy**: involvement, dedication, care, capacity of giving attention individually to each patient.

By comparing *the ideal profile* – that describes the ideal situations and *the real profile* – that describes the real situations (Bruhn 2001: 83) we will measure discrepancy between expectation and perception levels.

Present research is descriptive and cross-sectional one and has been conducted in May 2010, was focusing on inhabitants of city of Oradea and surrounding areas that have accessed medical services, whether public or private in the last 3 years (during 2007-2010). The research was conducted online using a nonprobability sampling technique, the snowball sampling. From a total of 141 questionnaires applied, 128 were used in final analysis.

This quantitative research has the survey as research method, supported by a structured questionnaire consisting of 57 questions, of which 22 evaluated on a double scale.

2. Data analysis and interpretation

Table 1 exhibits the demographic characteristics of the group of respondents, as follows:

Table 1: Demographics of respondents

	Number of respondents	%
Gender (n=128)		
- Female	84	65,6%
- Male	44	34,4%
Age groups (n=127)		
- under 25	35	27,6%
- between 25 and 34 years	40	31,5%
- between 34 and 44 years	28	22,0%
- over 45 years	24	18,9%
MissingSystem	1	

	Number of respondents	%
Income (n=128)		
- < 1000 Ron (< 230 Euros)	48	37,5%
- Ron 1001 - 2000 (Euros 230-470)	41	32,0%
- Ron 2001 - 3000 (Euros 470-700)	14	10,9%
- > 3001 Ron (>700 Euros)	11	8,6%
- Do not know	11	8,6%
- Decline to answer	3	2,3%
Studies (n=128)		
- Undergraduate Studies	59	46,1%
- University degree	39	30,5%
- Postgraduate Studies	30	23,4%
Type of medical services (n=128)		
- Private	68	53,1%
- Public	60	46,9%

Source: own research

Overall aim was to identify a possible profile for the people who turn to the private medical services. By correlating the variable **Type of medical services (public/private)** with each of the variables **Gender, Age groups, Income, Studies**, conclusion reached was that out of those who required private medical services:

- 73,5% are women;
- 38,8% are between 25 and 34 years old;
- 45,6% have highschool education;
- 49,1% have the income under 1000RON (about 230Euros).

It is important to mention that there is a significant correlation (Pearson coefficient value being 0,034 <0,05) only when we have it between *Type of services* and *Gender* variables. Still, the intensity of the link is weak, Cramer coefficient value being of 0,177. From a standpoint of these characteristics, there is not resulting a profile of the private medical services customer, at least at Oradea level.

H1: The discrepancy between expectations and perceptions is bigger in the case of public medical services than in the private ones.

In order to check this hypothesis, for each of the 5 dimensions involved in the satisfaction level calculations we determined the average results both at expectation and perception levels. The discrepancy is calculated as difference between the results on these 2 levels.

Based on the resulted data, it can be concluded that the level of discrepancies between expectations and perceptions related to medical services is a lot less for private services (the values are between 0,40 and 0,79 for private medical services, while they have values between 1,39 and 1,67 for public medical services).

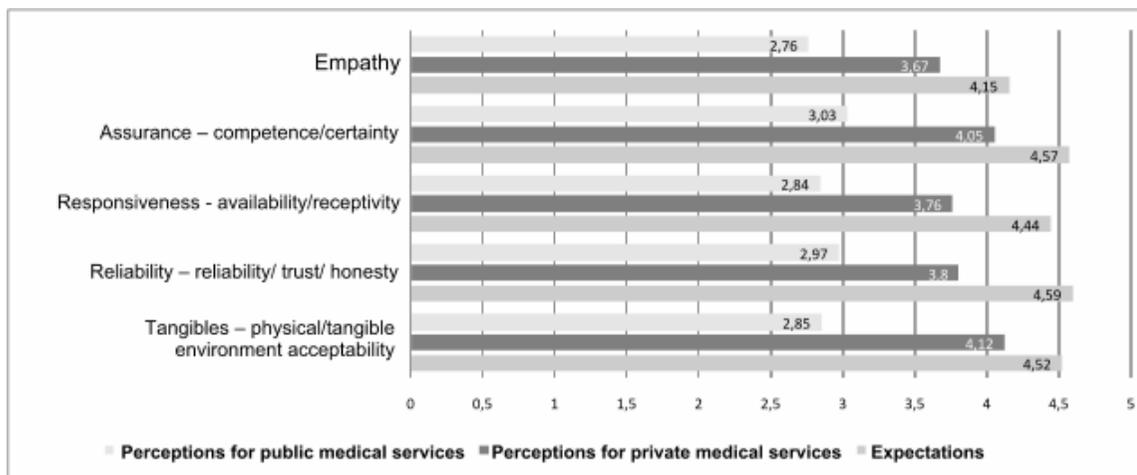


Figure 1: Comparison expectations vs. perceptions for medical services (public vs. private)
Source: own research

According to the above data we can remark that the highest level of expectations from the medical services aims at Reliability followed by that of Assurance. The smallest score regarding expectations refers to Empathy.

Interestingly enough regarding perceptions is that the highest calculated score for the public medical services is lower than the lowest score for the private medical services. It is also worth mentioning that the smallest calculated results concern empathy, for both public and private medical services. Also, even if there is a difference between the scores calculated for the perception of dimensions in the case of private medical services compared with the public ones, the hierarchy is almost the same. The only difference is that the perception of the physical elements has the highest result for the private medical services (see Tables 2 and 3).

Table 2

Hierarchy perception scores for public medical services	
Empathy	2,76
Responsiveness - availability/receptivity	2,84
<i>Tangibles – physical/tangible environment acceptability</i>	2,85
Reliability – reliability/ trust/ honesty	2,97
Assurance – competence/certainty	3,03

Source: own research

Table 3

Hierarchy perception scores for private medical services	
Empathy	3,67
Responsiveness - availability/receptivity	3,76
Reliability – reliability/ trust/ honesty	3,8
Assurance – competence/certainty	4,05
<i>Tangibles – physical/tangible environment acceptability</i>	4,12

Source: own research

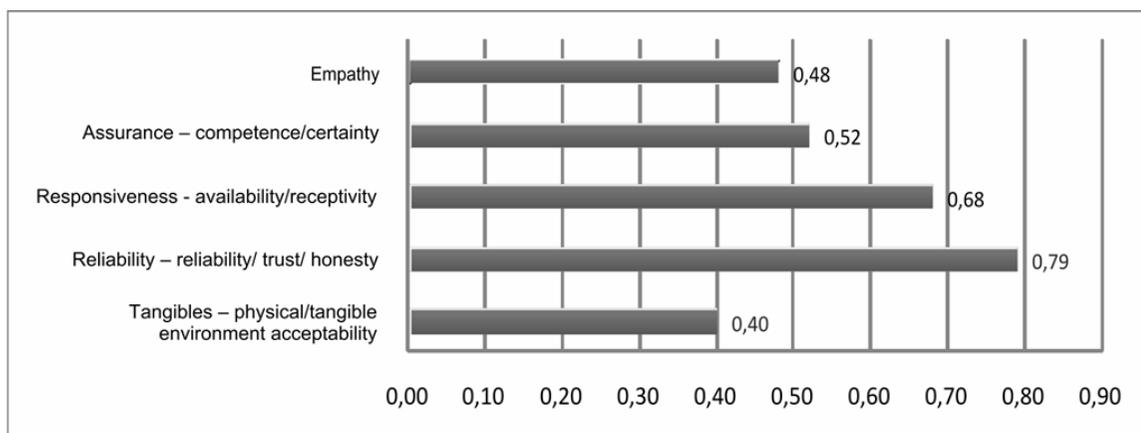


Figure 2: Discrepancy between expectations and perceptions for private medical services
Source: own research

It can be noticed that for the private hospitals, the greatest discrepancy is in Reliability/Trust/Honesty, a dimension that has actually the highest level of expectations. The smallest discrepancy concerns the physical environment, the tangibles. A pretty low value can be noticed for the empathy, this one having also the smallest value regarding expectations.

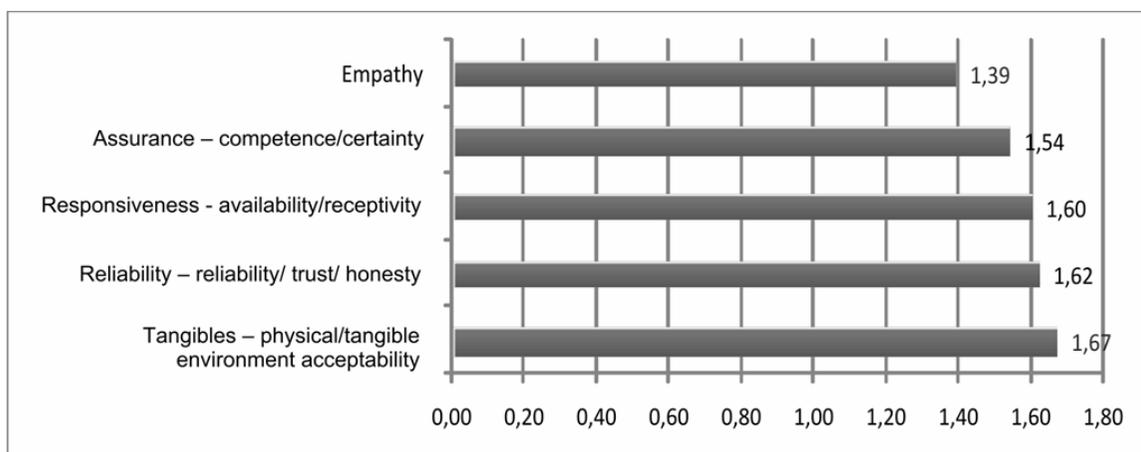


Figure 3: Discrepancy between expectations and perceptions for public medical services
Source: own research

The dimension which reflects the quality of endowment is the one with the biggest value referring the discrepancies between expectations and perceptions for the public medical services. Although the values are close enough, we see that the smallest discrepancy aims at empathy.

3. Conclusions and future research approach

- The hypothesis according to which the discrepancy between expectations and perceptions is bigger for the public medical services than for the private ones is confirmed. The scores calculated for the way in which the 5 analyzed dimensions are perceived from the quality point of view (of the offered satisfaction) are between 2,76-3,03 for the public medical services and between 3,67-4,12 for the private ones, 5 being the maximum value to give.
- The highest score calculated for the public medical services is smaller than the smallest score calculated for the private medical services.

- Another interesting aspect refers to empathy. This has the smallest score for both expectations and perceptions in both private and public medical services. An explanation of the low score regarding the expectations of this dimension could be the way in which it has been perceived in the course of time. The empathy here refers to the involvement, dedication, care, capacity of offering/giving attention to each customer/patient individually.
- There is solid argument, at least for Oradea surveyed area, from the point of view of these characteristics, that a profile of the private medical services customer is still vague and undefined.
- Even if there are discrepancies between the private medical services and the public ones for the calculated scores of the 5 dimensions, the hierarchy is almost the same: Empathy, Responsiveness, Reliability/Trust/Honesty, Competence/Certainty, except for the dimension aiming at the Physical/tangible environment acceptability. This one has the highest score for the private medical services and the third place for the public ones.
- As future research, we intend to measure (using a structured questionnaire) the intensity of the quality culture for the Romanian hospitals. As a consequence of all these results, we seek to validate there is a correlation between quality culture for the Romanian hospitals and the satisfaction degree of their patients/clients.

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STRATEGICALLY REPOSITIONING RUSSIA

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Positioning is a very important marketing concept. Its importance was strongly emphasized and implemented in the case of companies, but is somehow neglected when it comes to states. A country acquires a position in the mind of a person very much like any other product does, which is very important especially when that person exerts an executive role. Nowadays Russia has a poor image or no image at all, both internationally and in Romania. In order to regain an important position in the Balkans region, Russia must set aside any political agenda and reposition itself as a business partner on equal terms. The first goal of this article is to clarify Russia's position in the minds of future Romanian executives. The second goal is to outline a recommended course of actions for Russia's repositioning.

Keywords: marketing, positioning, strategy, Russia, marketing research.

JEL Code: M3.

Conceptual framework

The concept of positioning is strongly linked with the process of trade. Positioning was one of the marketing elements that had been used since the beginnings of trade. However, in those days its meaning was rather limited, focusing on the concept of "reputation". All the merchants were seeking a good reputation and wanted to stand out with something: the best/fresher products, the widest range of goods, the most famous/important clients. Further on, at the beginning of the 20th century, the social and economic progress led to the appearance of marketing as a science. However, we can definitely conclude that this isn't the birthday of positioning. This concept is not typical of the first two stages in marketing's evolution, namely the orientation towards production (1900-1930) and the orientation towards sales (1930-1950). This is due to the fact that the concept of positioning cannot endorse a theory whose primary focus is not the consumer. Therefore, the concept of positioning is typical of the orientation towards marketing.

The word "positioning" was introduced by Jack Trout, an advertising executive, in his 1969 article published by "Industrial Marketing" and "Advertising Age". A few years later, in 1972, he teamed up with Al Ries, another advertising executive, in order to write an article called "Positioning cuts through chaos in marketplace", also published by "Advertising Age" (Enis and Cox 1988: 410-420). This was only the beginning of their lifelong crusade aimed at establishing positioning as one of the most important concepts in marketing.

The first battle that had to be fought was over the content of positioning. As always, when a new concept arises, there is more than one opinion about its meaning. For instance, some authors considered that positioning is the differentiation of brands by studying the ways in which their consumers differ as well as how consumer perceptions of various brands differ (Alpert and Gatty 1969: 65). The flaws of their approach are that positioning is not presented as a process which unfurls in the mind of the consumer and its result is a classification of brands. There are authors who consider positioning to be a promotional strategy which attempts to place a brand along one

or a number of dimensions relative to other brands in the same generic class. No matter what dimensions are employed, positioning is essentially a strategy used by the marketer in an attempt to find a niche for his brand (Houston and Haneski 1976: 38). This is obviously a narrow definition with respect to positioning. This concept has equal importance for product, price, promotion and placement, which means that it cannot be just a promotional strategy. Positioning is very useful not only when looking for a market niche, but especially when confronted with strong competition. From the management standpoint, the author believed that positioning is a decision to serve a particular segment with a program tailored to those specific customer needs (Biggadike 1981: 624). Unfortunately, we can highlight here a confusion between targeting and positioning.

Nevertheless, after a few decades of debate the Ries & Trout definition of positioning prevailed. The story goes like this: a company discovers different needs in the marketplace, segments the market accordingly, targets those needs that it can satisfy in a superior way, and then selects and communicates a position which is relevant, effective and consistent with the company's distinctive offering and image. Positioning is the act of designing the company's offering and image to occupy a distinctive place in the mind of the target market. The result of positioning is the successful creation of a "customer-focused value proposition", a cogent reason why the target market should consider buying the product (Kotler and Keller 2006: 310). If a company does a poor job of positioning, the mind result will be a generalized confusion and a poor classification. On the contrary, if a company does an excellent job of positioning, then the rest of its marketing planning comes along smoothly.

The second battle that had to be fought was over implementing the concept of positioning in the daily business practices of every organization. We are still in the middle of this battle. Any organization should be interested in this concept, as all the successes and failures that were recorded on the for profit and not for profit battlefields can be easily explained using the positioning paradigm. Nowadays, there are still companies which go straight from identifying the need to marketing mix, but there are also many companies which use positioning as a weapon to undermine the competition and hypnotize the consumers. Nonetheless, there is still work to be done in order to clarify the role, ease the implementation and expand the scope of positioning to every human activity on Earth. There is also a need for improved marketing research methodology for positioning studies. A good progress in this area has been made by using the "means-end chains theory" (Vriens and Ter Hofstede 2000: 4-10).

Unfortunately, we face a much greater challenge when it comes to countries. Before embarking in such a difficult endeavor, we must ask ourselves: is really positioning a concept that can be applied to nations? Not only that the answer is yes, but it's very important for a country to make a constant effort regarding its position in the public's mind. Let's examine a few examples which support my theory (Popescu 2010: 119):

A) countries which ignore the concept of positioning:

1) Romania.

After 45 years of communist rule, Romania emerged on the world stage as a country with a very poor international image. For the international public, Romania was the country that shot Ceaușescu (the former communist leader) during Christmas, after the bloodiest and most violent anti-communist uprising in the whole Eastern Europe. The easiest way to see the results of little to no effort concerning positioning is when a conflict arises. In March 1990, Romania was experiencing an interethnic turmoil in Târgu Mureș, a city with a strong Hungarian minority. After a few weeks of rising tensions the Romanians and Hungarians clashed, leaving five dead and tens of others wounded. Romania/Romanians were depicted by the international media as the aggressor. Why? Let's examine the facts. Romanians were the majority, Hungarians were the minority. Romania had a poor international image, Hungary had a good image, boosted by a very

active lobby. Conclusion: the country with a poorer international image is very likely to be depicted as the aggressor and/or the guilty party in any conflict. A further downside is that, in the near future, such a poor image tends to go from bad to worse. In our case, Romania's image was further deteriorated by repeated miner uprisings and the illegal activities of the Romanian émigrés.

2) Serbia during the Yugoslav secession war.

The secession of a few members of the Yugoslav Federation should have been a peaceful process. Unfortunately, Serbia made the mistake of going to war against its neighbors under pretext of protecting the Serbian citizens who lived there. Although all parties were guilty of genocide and ethnic cleansing, Serbia was depicted as the aggressor. Why? Serbia had the advantage of numbers over any of its adversaries. Moreover, the international image of Serbia was damaged by the dictatorship of Slobodan Milosevici. Conclusion: Serbia had a poorer international image than Slovenia and Croatia, and it was immediately designated as the aggressor.

3) Russia during the 2008 Caucasus war.

The Caucasus is a sensitive region for Russia. On the one hand, Russia faces a separatist movement in Chechnya, and so far it has been unable to end this conflict with a negotiated solution. On the other hand, Russia supports two separatist movements in Abkhazia and South Ossetia, at the expense of Georgia. When Georgia tried to regain control over South Ossetia, the Russian troops intervened under the same pretext of protecting its citizens who lived there. This is a fallacious pretext and, as a result, Russia was depicted as the aggressor by the international media. The reasons are more than obvious: Russia has a history of imperial behavior towards smaller nations and it enjoys an overwhelming military advantage over Georgia. Moreover, the other side had a good international image as Mr. Saakasvilli came to power by ridding the wave of the orange revolution.

B) countries that apply the concept of positioning – The United States of America.

They are the classic example of outstanding communication for positioning purposes. Not all the conflicts in which America involved itself were just wars, but they were able to see them through without being labeled as the aggressor. The best example was the 2003 war against Iraq. Saddam Hussein had no weapons of mass destruction, but with tenacious and focused communications they convinced the public that he had. When the facts proved them wrong, they claimed that the morally acceptable reason for having this war was overthrowing Saddam Hussein and bringing democracy to the Iraqi people. This kind of mind juggling is possible only when you have a good international image, and such an image cannot be built overnight. America built its image since World War II by offering financial support to the Western Europe countries, by supplying security to its NATO allies, by exporting the American way of life, by movies in which is depicted as "the land of promise", "the home of the brave" and so on.

Based on the above examples, I believe we can derive a few conclusions (Popescu 2010: 119). First of all, it's obvious that the concept of positioning can be applied and is useful even when it comes to states. The positioning paradigm has helped us to analyze and understand the above examples. Second of all, the international image of a country is the main element which determines the position it occupies in the mind of the public. A country acquires a position in the mind of a person very much like any other product does. During its life, a person uses a multitude of sources (personal experience from visiting the country and/or interacting with its citizens, close relatives, friends, opinion leaders, mass media, other sources) in order to accumulate information about a country. Based on this information flow, a person builds and constantly updates the image of that country. This image can be summarized in one or a few words which describe the position it occupies in the mind of the person. This position is very important, as it will determine the person's future attitude towards that country and everything related to it. We

can further conclude that international media plays a vital role in implementing positioning, but there are also other tools for creating and communicating one's position. Last but not least, we can doubtlessly conclude that the easiest way to see the results of little to no effort regarding positioning is when a conflict or a crisis situation arises.

Our research

Keeping in mind the above conclusions, we can now take a closer look at the case of Russia. Generally speaking Russia has a poor international image, but when it comes to the Eastern European states the image is even poorer. This shouldn't come as a surprise for anybody. When the Soviet Union collapsed, Russia was very eager to inherit most of its assets and very reluctant to inherit most of its liabilities. Willy-nilly, Russia has to accept this burden, as it is considered the rightful heir of the USSR. The research has been conducted in Romania, so the results present only the position of Russia in the minds of my Romanian respondents. A future development on this theme would be to determine Russia's position in every Eastern European country and in Eastern Europe as a whole.

In order to guarantee the validity of our findings, we chose a full research. Thus, all the 3rd year (last year) students were asked to fill in a questionnaire regarding the positioning of Russia. We chose this group of respondents because starting this September they will begin working for Romanian or multinational companies. Their opinion is important because in the long run they are the future executives of those companies and, who knows, maybe the future leaders of the country. The following results were just a confirmation of our previous assumptions.

Our first objective was to determine whether the respondents believed Russia to be an interesting tourism and business destination or not. Previous research (Popescu 2010: 119) has shown a strong correlation between thinking highly of a country and selecting it as a future tourism or business destination. First of all, I compared Russia with other major European tourism destinations, such as France, Spain, Italy, UK and Germany. In this case Russia finished in the last place, having a poor minus 0.64 Likert score. Only 24% of the respondents selected Russia as a possible tourism destination, far behind UK with 80% or France with 79%. Second of all, I tried a regional approach by comparing Russia with all the other Eastern European countries. There were no positive Likert scores, which tells us that the Eastern European countries are far less popular as tourism destinations than their Western counterparts. Russia was indicated by only 23% of the respondents, trailing Croatia with 39%, The Czech Republic with 32%, Bulgaria with 30% and Hungary with 26%. We can now conclude that Russia's results are mediocre. From the tourism standpoint Russia isn't among the market leaders, as it was mentioned as a possible future destination by less than a quarter of our respondents.

The next step was to determine whether the respondents believed Russia to be an interesting business destination or not. First of all, I compared Russia with Germany, UK, France, Spain and Italy as main European business destinations. Again Russia finished in the last place, with a poor Likert score of minus 0.62. Only for 20% of my respondents Russia is a possible future business destination, far behind UK with 59% or Germany with 58%. Second of all, the regional approach compared Russia's business opportunities against the potential of all the other Eastern European countries. This time we had only negative Likert scores, as an indication that the regional business opportunities are either unknown or unattractive for our respondents. Russia was indicated by only 22% of the respondents, trailing Hungary with 30%, Bulgaria with 29%, The Republic of Moldova with 27% and Poland with 26%. Again Russia is not on the podium. This is a disastrous result if we take into account Russia's abundantly existing business opportunities.

Besides the poor international image, the above results are also due to the lack of information about Russia's opportunities. Most of my respondents confessed that they know very little about

anything concerning Russia, but they are eager to learn more. 67% of our respondents showed a lot of interest regarding Russia's touristic and business opportunities.

We have shown previously in this article that during its life, a person uses a multitude of sources (personal experience from visiting the country and/or interacting with its citizens, close relatives, friends, opinion leaders, mass media, other sources) in order to accumulate information about a country. Now we can tell for sure which are the sources used by our respondents in order to gather information about Russia. The internet was by far the most widely used source, as it was mentioned by 91% of the respondents. Very popular sources of information are also television (52%), the opinion of friends and relatives (48%) and the press (35%). Lesser used sources include participation to various events (24%), Russian cultural centers/associations (9%) and student organizations (6%).

The above results allow us to derive a few important conclusions. First of all, there is an obvious lack of information about everything concerning Russia, and this situation doesn't lead to a neutral but to a negative image. Russia needs to communicate more and do so in languages of international circulation. Second of all, Russia needs to communicate better, meaning that it should supply the international public with all the information that might be of interest. There is a significant interest for touristic, business and other types of opportunities, but the information available are scarce. Last but not least, Russia needs to take full advantage of the information sources available. If most of the respondents are using the internet, there is a need for better information sites, with at least an English version. If the respondents are using television, we need to support as many news about Russia as possible and we need a Hollywood-like film industry. Russia also needs to organize as many events as possible and to offer educational opportunities in partnership with student organizations.

This is the road ahead. It's a difficult road, but at the same time it's the only road. If Russia doesn't take this road, its image can only go from bad to worse.

VI. Note

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POSITIONING VS. STUDENTS, A TROUBLESOME RELATIONSHIP

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Positioning is one of the most powerful marketing concepts. At the beginning, the meaning of positioning was rather limited, focusing on the concept of reputation. Then it became "the place a brand occupies in the mind of its target audience". Under this meaning , many companies have implemented the concept of positioning as a part of their everyday marketing activities. Nowadays, you can position not only products or services, but also people, ideas and countries. The concept of positioning is simply too important to be ignored. Thus, it is our opinion that any student who graduates the first 3 years cycle should know the fundamentals of positioning. Unfortunately, this concept still doesn't have a clear place in the marketing faculty's syllabus and, as a result, it's not properly taught. The research is focused on determining the students' current level of understanding regarding the positioning concept and on identifying possible solutions for the future. What should we do in order to help the concept of positioning to acquire a place in the minds of our students?

Keywords: marketing, positioning, marketing research, education, mind.

JEL Code: M3.

Conceptual framework

The concept of positioning is strongly linked with the process of trade. Positioning was one of the marketing elements that had been used since the early days of trade. However, back then its meaning was rather limited, focusing on the concept of "reputation". All the merchants wanted to have a good reputation and to stand out with something: the best products, the widest range of goods, the most famous/important clients. Further on, at the beginning of the 20th century, marketing emerged as a science due to the accumulated social and economic progress generated by thousands of years of evolution. However, we can clearly conclude that this isn't the birthday of positioning. The concept of positioning is typical of the orientation towards marketing (1950-1990), thus setting its birthday in the second half of the 20th century.

The word "positioning" was introduced by Jack Trout, a practitioner from the advertising industry, in his 1969 article published by "Industrial Marketing" and "Advertising Age". A few years later, in 1972, he teamed up with Al Ries, another advertising executive, in order to compose an article called "Positioning cuts through chaos in marketplace", also published by "Advertising Age" (Enis and Cox 1988: 410-420). So, what's the meaning of positioning? Positioning is the act of designing the company's offering and image in order to occupy a distinctive place in the mind of the target market. A good brand positioning helps guide marketing strategy by clarifying the brand's core values. The result of positioning is the successful creation of a customer-focused value proposition, a cogent reason why the target market should consider buying the product (Kotler and Keller 2006: 310).

There are still some pendent aspects about the concept of positioning. The first problem is where to fit this concept in the marketing process as a whole. In my opinion, positioning should have its

place in the following sequence: marketing research, segmentation, targeting, **positioning**, marketing mix design. Nowadays, there are still too many companies which go straight from identifying the need to marketing mix, without even considering their positioning alternatives. This situation of "no positioning" is the worst possible. Ideally speaking, any company should act as follows: it identifies a set of different needs in the marketplace, targets those needs that it can satisfy in a superior way, and then selects and communicates a position which is relevant, effective and consistent with the company's offering and image. If a company does a poor job of positioning, the only possible outcome will be a generalized confusion. On the other hand, if a company does an excellent job of positioning, then the rest of its marketing planning should come along easily.

The second problem derives from the first and concerns the role of positioning fulfill in the marketing process. I believe that positioning has the role of coordinating the company's marketing endeavor. We can break the marketing process into four stages:

- **the research stage**: the company gathers all the necessary information related to the general environment, the market and its competitors;

- **the positioning stage**: after analyzing the above data, the company must select a position that offers the best prospect of success on the market, but also a position it can support with its strong points;

- **the marketing mix stage**: upon choosing the desired position, the company's task is to communicate it through all the components of the marketing mix. The company's brand cannot occupy the desired position unless all the components of the marketing mix deliver the same image;

- **the implementation stage**: this stage can determine the success or failure of the company's marketing efforts, because process management errors can result in seriously damaging marketing mistakes.

Consumers usually buy products/services that offer them the greatest perceived value. The brand's **value proposition** refers to the full set of attributes/benefits/values upon which the product/service is positioned. Usually, the company can choose from a few positioning alternatives which are available, relevant and within reach. However, there are only five winning value propositions, meaning that the company gains a competitive advantage. When speaking about education, we can adapt these **5 winning positioning alternatives** (Kotler and Armstrong 2006: 225) as follows:

- 1) **More for more**. This alternative involves providing superior quality, craftsmanship, durability, performance or style and charging a higher price to cover the higher costs. The strong point of this alternative is that it symbolizes status, thus giving prestige to the buyer. Yet, this alternative is vulnerable to imitations and economic downturns. In the field of education, this position is occupied by the foreign universities. They offer higher status, giving prestige to their alumni. As a result, they charge a significantly higher price than their Romanian counterparts;

- 2) **More for the same**. This alternative is aimed at attacking the more-for-more positioning. If applied correctly, this alternative can be highly successful. In the field of education this position is unoccupied, and it represents the best choice for the Romanian public universities. By building connections and partnerships with the business environment, they could provide more value without significantly rising the taxes;

- 3) **The same for less**. This can be a very powerful alternative, building its success on the fact that everyone likes striking a good deal. This alternative is also applied when companies develop imitative and lower-priced brands in order to steal market share from the leader. In the field of education, this position is occupied by the Romanian private universities. They claim to offer the same education as their public counterparts, but for less money;

4) **Less for much less.** This alternative is built upon the idea that not everyone can afford only the best in what they buy. Many consumers will settle for a product/service that offers less and as a result costs less. One of the risks involved in applying this alternative is going beyond the lowest level of quality and performance acceptable for the consumer. A second risk appears when this alternative is used by two or more companies on the same market, which can lead to price wars. This alternative doesn't really apply to the field of education. Most people wouldn't take the chance of getting a poor education just for the benefit of paying much less for it;

5) **More for less.** If possible to achieve, this would no doubt be the winning positioning alternative. In the short run this is actually possible, but in the long run companies will find it very difficult to deliver on both of these promises. As offering more usually costs more, sooner or later companies must decide if they want to compete primarily on "more" or on "less". This is also an alternative that doesn't apply to the field of education.

Each brand must choose the positioning alternative that best serves the needs and wants of its target segments. In any market, there is always room for many different brands, each actively pursuing different positions. Once a company has selected its desired brand positioning, there is still a long way ahead. There are still four marketing mix components to be coordinated, which is always a difficult task. Moreover, there is still the implementation stage, a never-ending struggle for market supremacy. Yet all the upcoming battles are half-won if the company manages to occupy and communicate the desired position.

There are still battles to be fought regarding the concept of positioning. For instance, there is still work to be done in order to clarify the role and ease the implementation of positioning in every organization. There is also a need for improved marketing research methodology for positioning studies. A good progress in this area has been made by using the "means-end chains theory" (Vriens and Ter Hofstede 2000: 4-10). A new development is the possibility to use this concept in order to position countries. A country acquires a position in the mind of a person very much like any other product does. During its life, a person uses a multitude of sources in order to accumulate information about a country. Upon interpreting this information flow, a person builds and constantly updates the image of that country. This position is very important, as it will determine the person's future attitude/behavior/bias towards that country and everything related to it (Popescu 2010: 119).

Our research

We undertake this research for the third year in a row. One could ask which is the force that drive us to start this research sequel? Positioning is a very important marketing concept. This is probably an idea that needs no more reasoning. Enough of a reason should be the very important part positioning plays in the strategic marketing planning process. If positioning is such an important concept, it should be a component of the marketing faculty's syllabus. No student should graduate the first 3 year cycle without knowing the fundamentals of this concept: the meaning of positioning, what is a positioning map, which is the positioning's place in the strategic marketing planning process. Unfortunately, at the moment positioning is barely mentioned in the introductory marketing course, and it enjoys a few other sporadic appearances throughout the core marketing courses. Our goal was to measure the results of this situation and to analyze them from a multiannual perspective. In order to guarantee the validity of our findings, we chose a full research. Thus, all the 3rd year students were asked to fill in a questionnaire concerning the positioning concept.

First of all, we wanted to see whether our students know the meaning of positioning or not. This is not a random endeavor. Previous research (Popescu 2009, 2010) have shown a lack of knowledge regarding this concept. Besides that, if all the students would know what positioning means, there would be no need for further study on this matter. Thus, we discovered that 27% of

the students don't know the meaning of positioning. This result might be considered encouraging, having in mind that the rest of 73% are familiar with the concept. Unfortunately, we consider the results to be discouraging, as they are smaller than the 2010 percentages. Once again, the results show the need for an in depth study regarding positioning.

Second of all, we wanted to see whether our 3rd year students know how to measure positioning or not. If a student knows what positioning means and how to measure it, there is no need to further study this concept. The results are surprising, to say the least. Thus, we discovered that 71% of the students are unaware of the fact that we can do this by using a positioning map. We consider the results to be surprising, as they are better than the 2010 percentages. The conclusion would be that less students are familiar with the concept of positioning, but more students know what a positioning map is. This paradox will be eliminated when students will undertake a thorough study concerning positioning.

Third of all, we wanted to see whether the students know which is the positioning's place in the strategic marketing planning process or not. If a student knows what a concept means, how to measure it and where to insert it in the overall picture, there is no need to further study it. Unfortunately, the results are disastrous. Only 5% of the students know the correct answer to this question. Equally disastrous is the fact that the results are poorer than the 2010 percentages. This situation is a more than enough reason to accept the need for a distinct place for positioning in the marketing faculty's syllabus.

Last but not least, we wanted to see whether the students themselves perceive the need to learn more about the concept of positioning or not. Most of the students became aware of their lack of knowledge when confronted on this subject. Thus, we discovered that only 5% of the students think they don't need further training on this subject. 61% of the students want to know more about positioning, by making it a chapter in the marketing introductory course. The rest of 34% believe that the presence of a "Positioning" course in the marketing faculty's syllabus is highly desirable. We believe that these percentages speak for themselves. 95% of the students would welcome additional training as a result of their lack of knowledge concerning positioning.

Based on this research, we've concluded that students need to further study the concept of positioning. It is our belief that this need should be addressed as soon as possible in order to fulfill our main objective of delivering skilled graduates.

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THE IMPORTANCE OF ENVIRONMENTAL PROTECTION IN CSR POLICY

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The CSR policy of companies occupy a privileged environment through coaching programs to other interests such as employees, suppliers, customers, authorities and various NGOs. This is why we wanted to see what the environment is important for managers on companies in Romania, the company's CSR policy.

In the literature the definition of social responsibility and ways to implement this in practice are often encountered. Some authors claim that societal marketing concept has not found its way into the language of business. From here, there were other terms that had a greater impact on the business environment such as social responsibility. Increasing the company's impact on the environment, the pressure exerted by stakeholders, and identifying positive elements of socially responsible approach have been the main stimulus for development of social responsibility. From that a lot of studies on academic and commercial problem.

And the present study fit the same line we conducted a research on 50 companies, it was an exploratory research. As respondents were chosen only marketing managers or general managers or even owners compnaie depending, in other words I tried to go directly to company decision makers in developing and building its image. While this one sample is statistically representative of the point of view we have covered with him in all areas of business activities and of all sizes can say that the results provide a clear enough picture of managersmentality in companies in Romania on business activities with the problem of interreactiunii environment Managers of companies in Romania recognize the environmental problems and say they are implicating in various actions to protect the environment. On the declarative level social environment is one of the most important areas being the most nominated as one of the top three areas of social nature that would involve having the greatest opportunity for development in coming years, over 60% of companies saying they would like to be involved in future environmental programs. Instead, the real actions to protect the environment are relatively few or are carried out not caring for the environment but because of economic worries, because there is an economic advantage for application of these methods. These actions result in social activities and what they had to declare they have made to protect the environment and the ways reporting their concerns for the environment in economical manner. The lack of environmental reports, the lack of certifications and the lack of requirements of certification among the suppliers shows once again the real place of the environmental problems among the managers interests.

Key words: green marketing, ecological products, Romania

JEL Classification: M31

I. Introduction

The policy of corporate social responsibility is a topic increasingly more common in the literature. Concern for the environment came to be in the 70s one of the most discussed topics in the world. The CSR policy of companies occupy a privileged environment through coaching programs to other interests such as employees, suppliers, customers, authorities and various NGOs. This is why I wanted to see what the environment is important for managers on companies in Romania, the company's CSR policy. Since many companies and especially among the young do not have a formal CSR policy, we have formulated questions refering to the social

important of different issues. We did succeed in demonstrating that in statements that there is a greater concern for the environment but actually at quite a few concrete actions. This gives a quality of care for the environment quite poor and will lead to sporadic actions without real content in statements although things are very good.

II. Literature review

In the literature the definition of social responsibility and ways to implement this in practice are often seen (Carroll 1999: 268, Jones 1995: 404, Porter and Kramer 2006:78; Windsor 2001: 225). It shows a development of the concept of environmental care is defined as societal marketing (Kotler and Keller 2008: 29) at social responsibility programs the corporation. Some authors claim that societal marketing concept has not found its way into the language of business. From here, there were other terms that had a greater impact on the business environment such as social responsibility, business ethics, corporate citizenship. (Abratt and Sacks 1989: 25). The debate about social responsibility based on the role that a company should play in society. Increasing the company's impact on the environment, the pressure exerted by stakeholders, and identifying positive elements of socially responsible approach have been the main stimulus for development of social responsibility. This sense at this time many companies report environmental care activities in their CSR policies (KPMG 2008). And the Romans were also made studies on CSR policy organizations. (Stancu 2007: 1212; Baleanu, Chelcea and Stancu 2011, 235), which concludes that CSR policy and began to work in companies in Romania. Therefore we proposed in the present research to see how environmental protection is seen as an element of corporate social responsibility.

III. Methodology

This article is based on a research conducted on 50 Romanian companies. It must be said at once that this research is not representative of all firms in Romania, not being chased an exact textual respondent firms. The research was an exploratory one. Study objectives were to determine to what extent the natural environment is an important issue for companies in various fields in Romania and what place it occupies in their policy issue of social responsibility.

The hypothesis that we left from are that although environment is listed as one of the main concerns of firms in Romania, concrete actions are very few in number and do not support the position that respondent's statements environment occupies. As the research base we have chosen a small sample of 50 companies, 90% of them are private companies, and only 6% and 4% are public respectively mixed companies. As 68% of them have entirely Romanian capital, 16% foreign owned capital and the rest mixed. Most companies, 82% are limited liability companies and the remaining 18% stock companies. As for the work area were chosen companies almost from all activities fields in order to see the point of views from each area. So, there is 1 company from each field like office and stationery, communications, industrial – machines tools, representing 2% of the responses. The remaining areas have had the following representation in research: food, drinks - 8%, chemicals, rubber, 8%, computers, internet, software 4%, tourism, sports, entertainment 8%, electric and electronic 4%, real estate 8 %, processor industry 4%, consultancy services 16%, textiles and shoes 8%, construction, decoration, furniture-18%, and 8% other areas. In terms of number of employees 36% companies have less than 9 employees, 42% have 10 to 49 employees, 18% have 50 to 249 employees and 4% have over 250 employees. Turnover of the firms surveyed were under 50 000 euro 30% of the respondent, 50 001 - 500 000 euro - 40% of them, 500 001-5 million euro - 12% of them, 5 million to 8 million euro -10% and 8% over 10 million euro. As respondents were chosen only marketing managers or general managers or even company owners depending, in other words we tried to go directly to company decision makers in developing and building its image. As said, though this one is not a

representative sample from statistical point of view we have covered with him all areas of business activities and all sizes companies and can say that the results provide a clear enough picture of managers mentality in companies in Romania on the problem of business activities interacting with the environment.

IV. Results

Leaving from the research scope we asked managers to put in order of importance the most important roles of the companies from their perspective. Thus 12% of respondents have made contribution to protecting the environment first, 32% of them putting on one of the top 3 environmental protection as one of the most important three roles played by companies. In other words 68% of respondents see no concern for the environment as one of the most important roles of a company. If we compute an average ranking after ordering principle (Cătoi et al. 2009: 168) concern for the environment down the middle as you can see charts and data below (Table no. 1), after supply and services.

Table no. 1: Name the first three roles of the companies you consider to be the most important.

	Unmentioned in top 3	Rank1	Rank2	Rank3	Mean
Paying taxes / wealth creation	23	14	5	8	1,2
Create jobs / hiring people	24	8	12	6	1,08
Contribution to environmental protection	34	6	4	6	0,64
Obtaining income / wealth and economic growth	7	5	10	28	1,26
Contribution to social progress	37	4	3	6	0,48
Respecting ethical standards	38	4	3	5	0,46
Contributing to scientific progress / research	41	4		5	0,34
Provision of goods and services	17	2	12	19	0,98
Participation in society / community	36	1	11	2	0,54
Adherence to laws / government regulations	43	1	2	4	0,22

On the other hand, better environmental protection is a term rooted in the collective consciousness. When asked, which would be the three most important areas of social nature a company is supposed to involve into, almost all respondents nominate on one of three positions environmental protection. Thus, although scores the 4-5 place in terms of first nomination, which positions it in the middle of the ranking, it has the fewest unmentioned all areas of social nature. After making a calculation with ordering ranks method it obtain highest average and was ranked first with this indicator with an average of 1,14 (see Table no. 2).

Table no. 2: Which are the three most important areas of social nature in which a company should get involved

	Unmentioned in top 3	Rank 1	Rank2	Rank3	Mean
Financial or material support for some social cases (floods, orphans, elderly, etc.)	27	12	4	7	1,02
Solving the health problems of people	31	7	10	2	0,86
Collaborating with educational institutions (schools, universities)	34	7	3	6	0,66
Environment protection	15	6	10	19	1,14
Education	35	6	3	6	0,6
Art and culture	34	5	8	3	0,68

	Unmentioned in top 3	Rank 1	Rank2	Rank3	Mean
Cooperation with NGOs or authorities	37	4	6	3	0,54
Benefits and employee development	22	2	8	18	0,8
The fight against discrimination of any kind (sex, race, age, etc.)	37	1	7	5	0,44

In terms of involvement in social programs in over 50% of all respondents declared their involvement in environmental protection programs, placing this area 3rd beneficial after „Benefits and employee development” and „Financial or material support for some social cases” with 20% of the responses gathered. If we consider that employee development is a social action not without interest from employers regard, we can say that environmental protection sits pretty well in this regard.

In terms of desired social areas to be developed by firms in the coming years, the statements are more than 60% of companies wishing to develop environmental protection projects, scoring first in the rankings even more than the benefit and development of their employees.

As we stated in hypothesis we started from the idea that companies will say that the environmental problem is a problem that interests and they'd like to get involved in solving it. The first part of the questionnaire highlighted this. The second part of the questionnaire was developed not on declarative statements but on concrete answers in terms of environmental care. Anyway we obtained throughout this questionnaire only stated behavior, recording what our respondents wanted to declare and not their actual conduct. We are convinced that an observation based on variables proposed in this second part of the research would lead to even greater differences in terms of lack of care for the environment.

When asked about whether the organization affects the environment in some way, 78% of responses said that was not true and only 22% recognizing that the organization is not environmentally friendly. It is known that any human activity either social or economic produces changes in the environment, the respondents do not think that any economic activity inevitably leads to energy and resource consumption and disposal of waste leads to the environment affecting. Even had a response to an open question where a respondent says that the organization is in financial services and has no way to affect the environment. Seem that the generated amounts of papers on documents are not seen as a pollutant, as they really are. 52% of the responding firms said that they develop environmental protection activities. When they were asked to nominate the types of activities have been related to the purchase of equipment with low energy consumption or production locations rearrangement which probably happened in an economic boost and had as effect a reduction in pollution. Another category of responses was that related to the integration of permitted pollution limits or respecting the rules in force this showing not a care regarding the environment but a concern not to violate the law and to receive penalties. We receive answers that we catalog at the category of confuse responses like the ones mentioning the action of keeping clean at work. As answers with direct link to that question we note the ones that state to manufacture products that have higher environmental quality than those of competitors although we do not know if this was a quality watched in the design or a subsequent realization. But most cases are regarding the selectively collected of waste 6%, the afforestation 6% and recycling 22% of total respondents.

This shows a huge difference between the declared social involvement, environmental protection 54% of respondents see above and effective actions, we believe to be real social action the ones like afforestation the others being only production, economic or legal objective. It said that the question was put like an open question with three possibilities of responses to which the large majority gave only a single response.

Trying to motivate the actions taken we put a multiple-response question. When designing the questionnaire we didn't aimed to do analysis below, but the effect achieved is quite clear. 76.9% of companies say that because of society obligations they were determined to take environmental actions, while 50% of companies said that the legislation in force was the cause and 34.6% that is more economical for the manufacturing process. Here we believe that we capture the declarative character of many responses. Because if you require legislation or find it more economical for the manufacturing process when you cannot declare that your actions are motivated by moral obligation to society. We appreciate also the response of 3.8% of cases and states that the motive was because competitions do it.

If we wanted to see what are the reasons that cause environmental concern we also tried to record in parallel the reasons for them to not have better care. It should be noted that it will always find reasons to excuse the lack of environmental initiatives. Perhaps the most concrete and the most difficult to verify are the financial effort that should be made, over 50% of cases. Lack of time is raised by over 40% of the responding firms. From our point of view this type of response is clearly the type of response to escape from responsibility and it seems the worst kind of response that can be given. Along with another type of response that occupies 11.4% of respondents, that is not a serious problem. Another category 22.7% of respondents said that there is no alternative and 2.3% that is cheaper the current production system. Other reasons listed, that should be categorize as real reason: because we are not oblige by anyone 18.2% and 11.4% because there are not such concerns in the company.

To see other opinions about the environment we designed a battery of 5-steps Likert questions (Cătoiu at al. 2009: 160) for which we have calculated the average and distribution of frequencies graphically. (see Fig. no.1).

Thus we can say that organizations do not consider their products as environmentally harming but rather the usage and their production are environmentally unfriendly. As well as the frequency distribution and the means shows that the statements referring to the competitors' products and to the products quality of recycling the opinions are equally divided and there is not a dominant direction. The last three statements on packaging and on their car park show that respondents believe their packaging is environmentally friendly, that their packaging is necessary and that the fleet that they have is clean. After analyzing all the questions we can conclude that organizations still do not see many problems with the protection that their companies should give to the environmental, the organizations remaining unaware to the environmental issues, being still incarcerated in this economically reality.

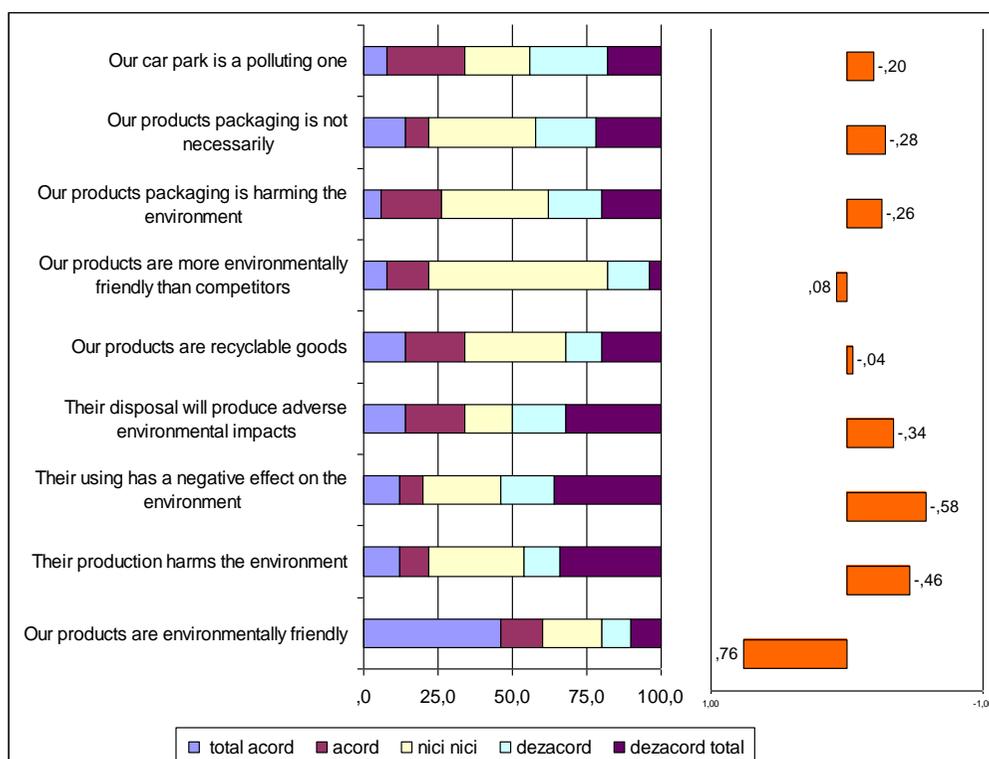


Fig. no.1 Distribution of frequencies and the average for Likert-type statements

In other order of ideas 70% of companies say they do not prepare an environmental report for the year, 68% said they do not have a portfolio, which it considers environmentally friendly products, and among those who say they have organic products only half could be framed in this category and should be organic textiles, food products, heating systems based on solar energy. Other results of the research are:

-the majority, 62% of firms said they have no requirements on environmental protection for products obtained from suppliers which shows that they have an environmental policy.

-72% of companies said that the company is trying a reduction in consumption of raw materials used.

-and 86% have do not have an environment certificate and among those who have the most common certifications are TUV and SRAC.

V. Conclusions

In conclusion we can say that our hypothesis was validated. Managers of companies in Romania realize the environmental problems and say they are implicating in various actions to protect the environment. On the declarative level social environment is one of the most important areas being the most nominated as one of the top three areas of social nature that would involve having the greatest opportunity for development in coming years, over 60% of companies saying he would like to be involved in future environmental protection programs. Instead, the real actions to protect the environment are relatively few or are carried out not caring for the environment but because of economic worries, because there is an economic advantage for application of these methods. These actions result in social activities and what they had to declare they have made to protect the environment and the ways reporting their concerns for the environment in economical manner. The lack of environmental reports, the lack of certifications and the lack of requirements of certification among the suppliers shows once again the real place of the environmental problems among the managers interests. The main contribution of this article is to

be the propose method of research behavior differences between declared and actual conduct. Although the study is not representative of the statistical point of view, the structure is well established the sampled companies obtained an overview of how the thinking of managers in Romania in general and not just big companies as it results from other studies. Companies that have a real CSR policy reason for it that is a good image for the company.

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ADOPTION OF E-BANKING IN ROMANIA – AN EXPLORATORY STUDY

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E-banking, or banking via the Internet, is revolutionising the business, having multiple benefits both for the financial institutions and for clients. E-bankers offer better customer service, creating opportunities for customers and providing added value. They treat customers as individuals, making mass customisation possible and creating customer loyalty. E-banking is an opportunity for banks to leverage their strengths and create a totally new banking experience. The present paper investigates and analyses the adoption and evolution of electronic banking in Romania, and the appropriate strategies for development of online banking services in the Romanian context.

Keywords: E-banking, customer adoption, banking channels, Romania

JEL Classification: G21, L86, M31

1. Introduction

Financial organizations rely on information and communication technology for information analysis, but also to differentiate their offers from competitors and to continuously innovate and update their marketing strategies, in order to meet customers' demands. These institutions use the most cutting edge technologies in order to reach out to customers and provide them the opportunity of performing interactive retail banking (Calisir and Gumussoy 2008: 215). The end result is a relationship-oriented marketing strategy which prioritizes the customer, the climate of trust, and the existence of mechanisms designed to promote increased knowledge and customer loyalty. Besides satisfying the customer, who is central to the relationship, banks must attempt to develop true and winning partnerships (Lejeune et al. 2001: 45-51).

Globalization, competition and the invasion of technologies, determined banks to adopt online solutions to build a clear and differentiable identity, as the Internet is now seen as an additional channel for branding, transactions and customer relationship management (Hackney et al. 2006: 354-368).

The adoption of E-banking was a necessity because offers major opportunities in terms of competitive advantage and allows banks to improve efficiency and operational effectiveness and to develop stronger and more durable business relationships with customers.

2. The adoption of E-banking by financial institutions

The movement towards E-banking was a natural process for credit institutions in the electronic age. Banking online refers to several types of services through which bank customers can request information and carry out most retail banking services (Aladwani 2001: 214; Gikandi and Bloor 2010: 277). E-banking refers to the use of different types of medium communication, such as the personal computer (PC banking), Internet banking, virtual banking, TV banking, online banking, home banking, remote electronic banking, WAP banking and phone banking (Dixon and Nixon 2000: 244).

E-banking is defined as a distance banking that handles the flow of information between customers' living spaces and the physical facilities of the bank, dealing with solicitation, sales, distribution and access to services, all without requiring the consumer and the financial institution representative to be in the same time physical place at the same time (Lemaitre 1997: 63-65; Vilattes 1997: 68-70).

From the point of view of stakeholders, E-banking is neither a technology, nor a purpose or an end on itself, but rather a business transaction, a strategy, a process, or an innovative business transaction (Munos 1999: 55-65).

The adoption of E-banking by financial institutions depended on: *organizational factors* (bank size, types of decision making, functional differentiation, the presence of technical staff, financial resources, technical infrastructure, decision markers' international experience, the aversion to risk), *factors related to the innovation and the structure of the market* (international profile of the bank, type of presence abroad, projected foreign markets) and *factors related to the strategy of the unit that adopts the innovation* (technological environment, relative advantage and complexity of the innovation) (Dadhfous 2002: 5), *geographical position* (Kalliannan and Awang 2010: 1-10), *age, degrees, accesibility, time, cost, cultural factors, trust, security, previous experience* in conducting online transactions (Moga 2011: 342-350).

The factors which affect the adoption of E-banking by customers are: Internet accessibility, strong resistance to change, perceived insecurity, inefficiency and inconvenience, learning requirements and increased responsibility, markedly negative attitudes and beliefs regarding the Internet, cost of computers and Internet access, trust in banks, security concerns, convenience and ease of use (Sohail and Shanmugham 2003: 214).

The benefits of the adoption of E-banking are enormous and include: reduction of total costs, increased execution of the operations in the market and an improvement of the customer relationship. These repercussions are not necessarily transformed into financial profits, but often passed to the customers in the form of reduction if the prices (Riddle 2001; Bernstein 2000).

E-banking ensures 24-hour-a-day, seven-day-a-week accessibility, through any type of advanced information system and for all types of financial transactions (Agarwal 2009: 341).

The key barriers to E-banking are the other equally convenient channels of distribution and the problems of using computers (Yiu et al. 2007: 348).

The organizational consequences of the adoption of E-banking are: reformulation of management processes (Deise et al. 2000: 272), reorganization of the management network, reformulation of the company's purposes and business portfolio, developing new activities and approaching, conquering, managing and retaining new markets (Badoc et al 1994), integration in the existing offer of new services (Munos 1998), expenses reduction, increase in market share, establish new methods of relationships between company and its customers (Hernandez et al. 2010).

3. Romanian banking sector – background

Romanian E-banking services market is in the early adoption stage; although it developed rapidly over the last few years there are still considerable development opportunities. Increase use of these services is due to increase Internet penetration among the population. According to a study published by Eurostat at the end of last year, Romania is among the countries with the lowest degree of public access to Internet.

The financial crisis had an enhancing effect on these services, pushing banks towards a thoughtful promotion and customers to understand the advantages of online banking. The need to reduce costs has led banks to move a larger part of their operations towards alternative channels, which provide lower costs. On the other hand, customers are more aware of the price paid for bank services, the time spent, the speed and safety of operations.

Table no. 1: Global values of main indicators of electronic banking instruments 2006-2010

Year	Type of instrument	Total number of users per year / instrument	Total number of transactions per year / instrument	Total value of transactions in Euro per year / instrument
2003	Total instruments	18.259	5.498.742	20.308.987.478
2004	Total instruments	44.538	7.818.435	35.604.679.462
2005	Total instruments	100.799	11.144.494	65.427.504.401
2006	Internet Banking	440.562	7.957.659	65.278.270.813,84
	Home Banking	71.887	8.499.339	59.938.699.698,84
	Mobile Banking	108.826	144.211	13.785.710,18
	Total instruments	621.275	16.601.209	125.230.756.222,87
2007	Internet Banking	1.061.190	10.624.529	47.451.161.213,27
	Home Banking	141.453	11.725.477	92.259.831.327,73
	Mobile Banking	337.979	178.784	29.741.471,03
	Total instruments	1.540.622	22.528.790	139.740.734.012,03
2008	Internet Banking	2.517.808	20.042.688	85.597.200.084,47
	Home Banking	329.940	15.068.159	143.440.859.725,43
	Mobile Banking	231.618	144.980	25.723.846,70
	Total instruments	3.079.366	35.255.827	229.063.783.656,60
2009	Internet Banking	3.018.307	17.062.081	10.131.822.484,37
	Home Banking	33.697*	3.722.461*	6.944.091.067,75*
	Mobile Banking	414.866	137.866*	869.422.890,00*
	Total instruments	3.466.870*	20.922.408*	17.945.336.442,12*
2010	Internet Banking	8.199.629	36.212.052	31.534.413.586,99
	Home Banking	138.282	9.885.974	28.851.242.649,28
	Mobile Banking	690.616	188.806	5.924.437,69
	Total instruments	9.028.527	46.286.832	60.391.580.673,97

Note: (*) Dates available from July to December 2009

Source: Own calculations based on the Status summaries of the use of payment instruments with remote access 2008 - 2010 of The Ministry of Communications, Technology and Information

The number of E-banking services users increased by 66% in 2009 compared to previous year, showing a constant interest and increased public awareness of such services, although according to a study of Deutsche Bank, less than half of Romanian small enterprises use E-banking and automated payment instructions.

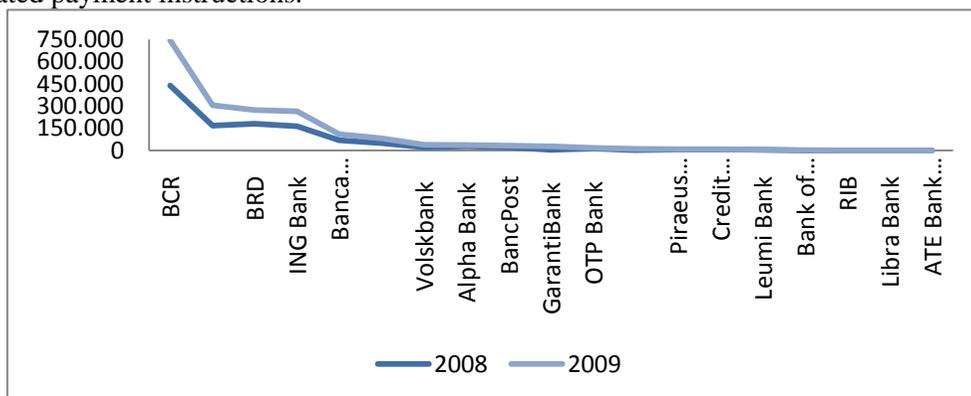


Fig. no. 1: Total number of Internet banking users

Source: Author's adaptation of eFinance analysis on Online Banking

The development is based primarily on the adoption and use of online banking applications by individuals. This expansion is not proportionally reflected in the increase of transaction numbers and their value, which indicates a lower use of these services compared with their extension.

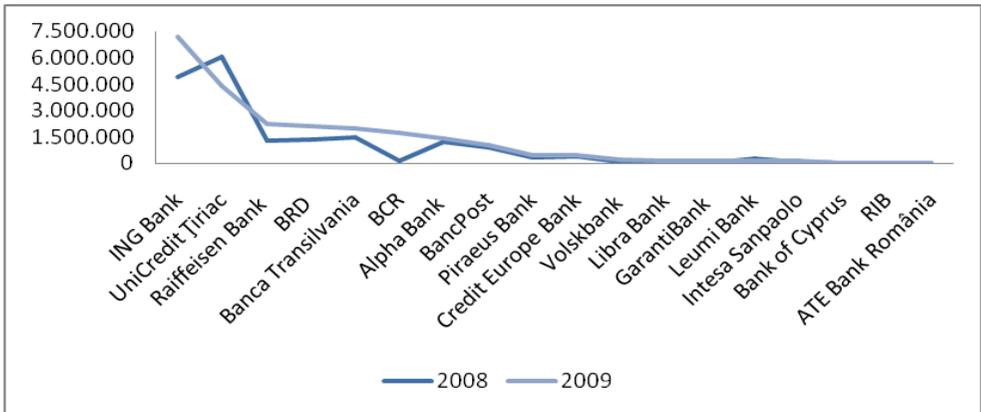


Fig. no. 2: Total number of Internet Banking transactions

Source: Author's adaptation of eFinance analysis on Online Banking

An online survey conducted by Bursa de Reclama in 2010 shows that 31.1% of Internet users use E-banking. In general, banks with high market shares in offline have high market shares in online; the top four ranked in terms of number of users were BCR, ING Bank, BRD and Raiffeisen.

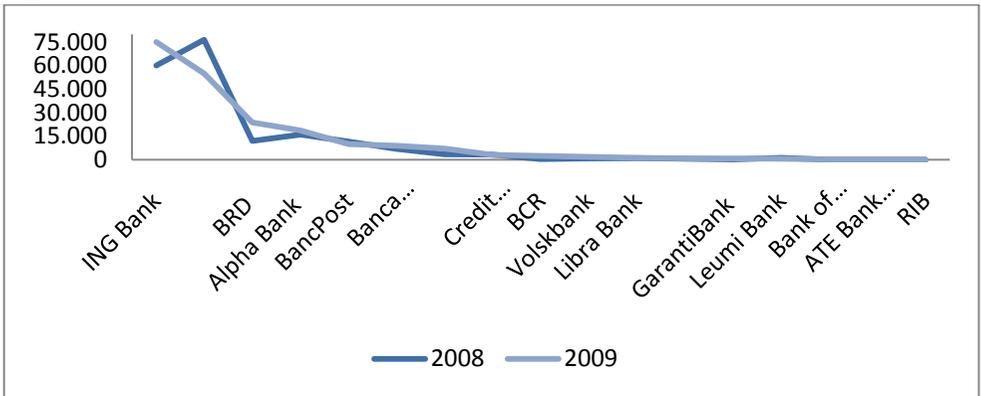


Fig. no. 2: Total value of Internet Banking transactions (Ron)

Source: Author's adaptation of eFinance analysis on Online Banking

Of those who adopted E-banking, the major services used are account transfer, bill settlement, account balance inquiry and interest rate/exchange rate inquiry. The main reasons for bank customers adopting E-banking were seen to be ability to perform banking transactions anywhere, anytime and quickly.

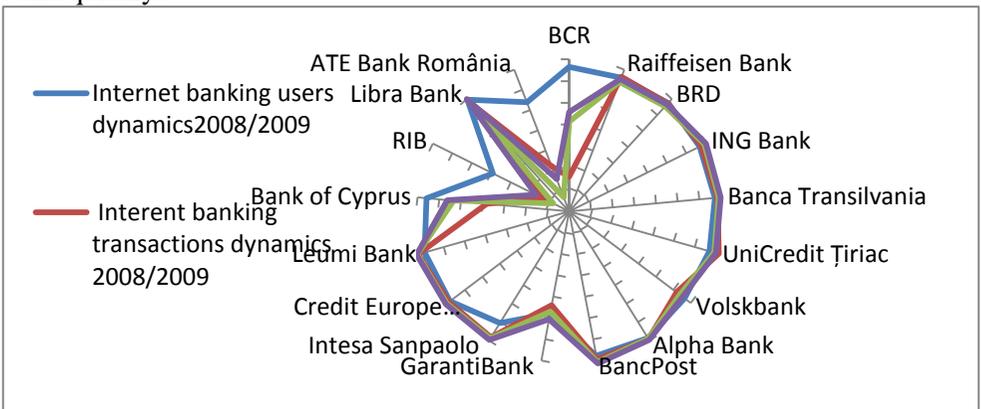


Fig. no. 3: Dynamics of Internet banking users, number and value of transactions

Source: Author's adaptation of eFinance analysis on Online Banking

The potential of E-banking services has been identified by banks, which have as a challenge to provide online banking services easy to access and use, but also very safe. Not only do banks have realized the potential of these services, but also customers that have found an effective, economical and reliable way to manage their accounts and payments.

E-banking services represent a challenge for banks' customers. In Romania, many will be persuaded to enter the race, and share with the bank the benefits of each online transaction.

Conclusions

E-banking is becoming one of the most important delivery channels of banking products. In response to global trends brought about by using the Internet, banks have to better understand their clients and respond quickly and strategically to market developments in customer centric ways.

The introduction of E-banking turned operations upside down and profoundly changed the overall logistics of the support system to the extent that customers and competitors began to think differently about the banks' know how and mission.

Evidence indicates that there are a great promotional efforts on the part of banks to create greater awareness of E-banking and its benefits. It is crucial for a bank to think about the future of service.

E-banking future challenges are: customers' trust, the speed of service delivery, customers' information privacy, customers' awareness, continuity of the service, spread of computer and Internet use, pricing of Internet service, Internet infrastructure, lack of legal regulations. Beyond security issues, banks must focus on simplifying on-line banking and targeting value driven consumers (Silk 2006), in effect adopting a much more customer, rather than technology or product centric approach (Shan and Hua 2006).

The adoption of E-banking provides added value for the customers and opportunities for banks to bolster income streams and secure longer term customer loyalty through relationship management. Although E-banking offers new frontiers of opportunities, there are several critical psychological and behavioral issues that need to be addressed in trust, security, reluctance to change and a preference for human interface.

The development E-banking in Romania depends on: strategic factors (new products and services, appropriate promotion, business integration, integrating different channels, expanding existing markets, building trust, costs), operational factors (good customer services, simplifying and integrating basic services, more convenient than the competitors, understanding customer purchase behavior) and technical factors (systems security, user-friendly web interface, personalization and customization capabilities, upgrading existing infrastructure).

In order to survive, banks will need to move away from traditional bases of retail bank competition (fees, interest, customer loyalty), to a new Internet based form of competition based on cost reduction, customer retention, responsiveness, credibility, security, ease of use, and wider scope of products and services.

To exploit the high value end of the banking supply chain, banks will need to familiarise the consumer with the processes and benefits of the service and encourage usage.

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BUSINESS INCUBATORS AND SUSTAINABLE INNOVATION

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Innovative businesses are often the result of collective action of organisations involved in many-sided market structures, which can be found in and around business incubators or technology centres. Within such frame environments, many group interests beyond those of single producers and their immediate clients exist and interfere. Rather generically, important economic outcomes of innovations are sequences of cost reduction events at the level of economic sectors, where the nature of (sector-wise) technology is influencing the pace of these events. At the conceptual level, we describe the social learning and social innovation process which leads to sustainable innovation by means of the influence exerted by firms on each other within constrained environments such as business incubators. These environments need not to be organized according to any sector logic. We propose that the influence exerted between firms is increasing in firm similarity, in the degree of product complementarity, and also to depend on (mutual) trust relations.

Keywords: Innovation, Incubators, Learning, Networks, Sustainability

JEL code: A12, M39, O30, O31

1 Introduction and motivation

Innovation is an important engine of economic development but it also entails a dual nature. While it enables formidable increase in productivity and comfort, occasionally finding solutions to very hard problems, in the longer term it also creates new problems and holds the potential for more and new types of disasters. Most of these features are difficult or impossible to predict in fine detail. However, the awareness of unforeseen risks is growing in various types of consumer and producer populations around the world. A rather vague but increasingly vociferous request is to stick to “sustainable solutions” in technical, economic, and social terms, meaning to find collectively acceptable and commercially viable ways to impose a sense of “expected medium term stability” of societal development. Examples of the dual nature of innovation abound. Some more extreme cases should illustrate this. Satellite telecommunication is revolutionizing entertainment, monitoring and parts of business. Space debris as an inevitable consequence is posing serious future threats and costs. Improved or even personalized medicines cure ever more diseases but they are posing both, huge challenges and costs of care for the aged, possibly also by proliferating later-life complex illnesses. Deep sea drilling taps formidable oil and gas reserves but is also producing hard to handle spills. Alternative energy solutions to fossile fuels can lead to astronomic future decommissioning costs. We note that, very much in symmetry with the role of sustainability in society as a whole, in the world of firms and markets, the incubation process may be viewed as a “moderator,” which attempts to overcome the disadvantages of highly paced, short-term oriented capitalist economies. In sections 2 and 3 a concept for representing the societal forces shaping sustainability and incubation for the innovating firm is described and ways of transforming the concept into concrete tools of assessment and valuation are pointed at.

2 Towards assessing the role of sustainability and incubation

Direct environmental consequences of using processes are already difficult to assess, e.g. think of the large number of variants of bio-fuel processing, which are contained in public science data bases like *Science Daily*. Consequences of using products and services may also be diverse, for instance by invoking a path dependent mechanism, which may “lock in” earlier but eventually

inferior solutions, a point put forward insistently by (Arthur 1989). Given multiple risks, both for the producer and the consumer of innovations, a *branded risk assessment* may be called for. Exactly this may be achieved in a credible way by an incubator network, which allows a multi-party involvement. Brondizio et al. (2009) and Ostrom (2009) teach us – albeit in a more general context – that polycentric systems (implying multi-party involvement) hold the key to sustainable solutions of complex problems involving environmental, social and a series of commercial and economic interests. Following (Ostrom 2009) there are four types of goods, namely [1] *Common pool resources* (example: forests), [2] *Public goods* (example: knowledge), [3] *Private goods* (example: clothing) and [4] *Toll goods* (example: daycare centers), which are mainly characterized by different property or appropriability related considerations. From a perspective which is more concerned with the description of innovation by firms, we stipulate that the new technologies imply multiple and changing roles of goods: Increased *personalization* of private goods may be achieved by heavily drawing on public and private knowledge and commercialization is achieved by different business models, for instance by making use of the role of the toll goods or by means of technology induced zero-price co-offerings as has been put forward by (Anderson 2009).

Apart from these basic considerations, empirical incubation processes assume complex structures and dynamics and are driven by complex motives. In spite of numerous failures, incubation is rather wide-spread today, both within developed and emerging economies. The context based evolution of incubators is leading to situations of “meta-innovation”, as is described for the case of emerging Brazil in (Etzkowitz, de Mello, and Almeida 2005).

In the last twenty years best practices for incubation have also been established as described in (Bergek and Norrman 2008), and the need for multi-criteria evaluation and ranking of business incubators is in high demand, see e.g. (Schwartz and Göthner 2009). However, the difficulty of evaluating incubators is related to the difficulty of measuring and assessing organizational creativity as described in (Sullivan and Ford 2009). Density of technological connectivity between firms has an impact on the inventiveness of science based firms, and somewhat surprisingly, venture capital has less influence on innovation intensity than expected, as is found by (Rickne 2006).

The role of branding incubators during and after the eventual success of technology spin-offs is highlighted in (Salvador 2010), the suggestion being that this somewhat special type of branding should be increased. As in any market, in the market for incubator tenants too, there is a need to educate the consumer, to stimulate demand and to cultivate awareness of the competition as is put forward by (Patton et al. 2009), and whenever possible, a “pipeline” for new business ideas should be sustained. This leads us to the domain of Knowledge Management (KM). Following Palacios et al. (2009), obstacles exist to effective KM introduction. Important reasons are named in (Yu 2002): (1) absence of a culture to share knowledge; (2) employees do not know much about KM; (3) no knowledge diffusion and learning; (4) insufficient internal knowledge transfer; (5) obsolete or over-complex technology; being the most important. (1)-(4) relate to insufficient networking and (5) to a narrow minded technology policy, e.g. the best technology from a network neighbourhood is not adopted. Gilsing et al. (2009) are stressing the fact that across different incubation environments, more radical innovations seem to be less often pursued than incremental ones, leading to *under-innovation*. Raymond and St-Pierre (2010) draw our attention towards a frequent situation, where “... the impact of R&D on product innovation is mediated by process innovation.”

3 A concept for a process-combining computational approach

In the sequel we will nevertheless attempt to draw up a concept, which is capable, in principle, to assess the role of sustainability and incubation and to evaluate networks of firms within such

structures. If appropriate, we also indicate which method can be used to solve the resulting optimization and data analysis sub-problems. Figure 1 collects the items and sub-processes involved in the incubation of firms, which posses the option to produce in a sustainable manner. An incubator may be regarded as a kind of super-firm, with less stringent short terms goals but with complex, and multiple, long term objectives. Both, a single firm and an incubator are subjected to competition but also face aspects of potential cooperation. Both must decide which markets to enter. For some hints of how to model such decisions see (Wawrzyniak and Wislicki 2008). While a mature or a non-incubated firm will focus more forcefully on price competition and product-line differentiation, an incubator may be thought of enabling more technological competition by its tenants, postponing "classical" competitive activities. Sustainability considerations are not within the shot term commercial goals of the single firm. Entry points for sustainability issues into the incubation-market process depicted by figure 1 may be created by long term actions of organizations within polycentric societal power systems as considered by (Ostrom et al. 2009). Eventually, they may impinge on all market participants to reflect about the outcomes, the private and the collective image effects of producing more sustainable products and by employing more sustainable technologies.

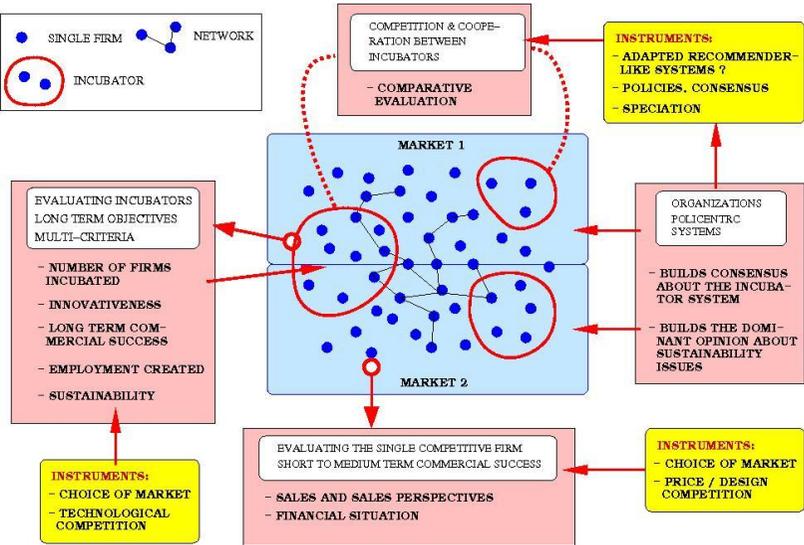


Figure 1: The incubation process and the entry points of sustainability issues and commitments.

At the level of incubator competition and cooperation there is room for designing instruments which for instance propose speciation of incubation services for certain markets and regions in a more principled manner. As described in (Schebesch et al. 2010), more adapted recommender systems proposed for computational marketing may be constructed. In order to finally arrive at a problem representation which more directly allows the derivation of computable models and the derivations of more concrete evaluation procedures for incubators and firms, we next focus on the innovation process, which seems to be central to both incubation and sustainability issues. In figure 2 we represent several sub-processes of innovation. The single firm is attempting to innovate in order to enhance its competitiveness. Innovation can be the result of "classical" in-house research and development, with costly exploration of new technological and product design solutions. The risk of in-house research can be temporarily lowered by incubation. Cost reduction of processes can eventually induce product innovation. Hence, evaluating the design complexity of technologies and its influence on cost reductions over time, and especially so over

past cumulated production as in (McNerney et al. 2009), will be most important in order to assess the pace and regularity of innovation events as a function of its underlying "engineering design". A new technology is represented by the introduction of a new interconnection matrix between process components. Sustainable technology solutions may be characterized by certain types of "recognizable" interconnection matrices. In more recent times, other important aspects of innovation processes such as innovation contests and social innovation are increasingly considered. Two premises lead to the growing relevance of this type of innovation procedures:

- In certain product classes and markets it becomes increasingly difficult to "forecast by expert opinion" what consumers really like.
- Organizational setup and transaction costs decrease dramatically with the spread of the internet and of different types of social forum subnets.

While in general such approaches are clearly useful for automated marketing and forecasting procedures (Schebesch et al. 2010), there is evidence that they can be applied (with adaptations) for innovation processes too, as is outlined in (Terwiesch and Xu 2008).

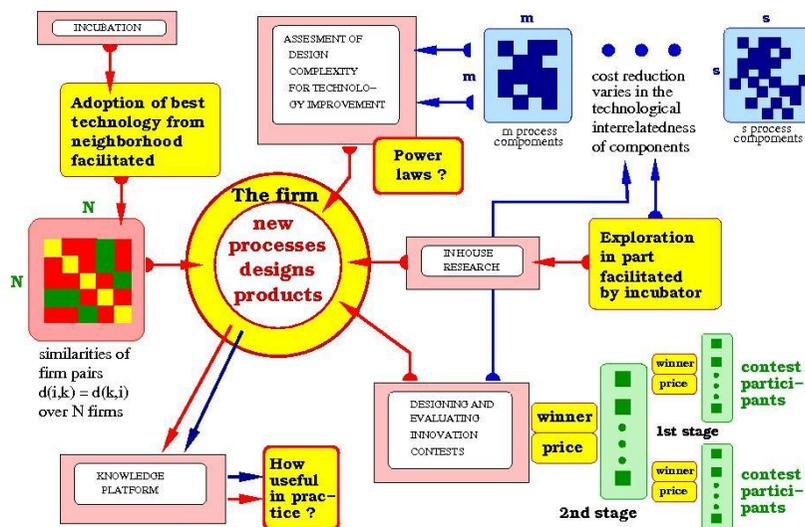


Figure 2: Innovation processes: innovation contests and technological interrelatedness.

The results of an innovation contest may be a process or a product innovation (figure 2, lower rhs process components). The innovation contest requires designing and evaluating a competition for new solutions of posted problems amongst a large number of participants originating from a larger societal context. In order to make these contests more efficient and more credible (i.e. to enhance serious participation), such innovation contests have to be designed to encompass two or more stages, with appropriate mechanisms for picking winners and for paying out prices for attractive or promising solutions. The outcomes of such innovation contests may contain also additional information, for instance with regard to acquaintance with and challenges caused by using sustainable processes and products, i.e. information about the degree of empathy and goodwill present in a wider population with regard to sustainability commitment.

A final item of figure 2 is the process item called "knowledge platform". While it would be certainly desirable to evolve such a knowledge platform (especially for incubators), there is to this day no compelling procedure concerning the collection and handling of information about all the mentioned sub-processes of innovation, their variants and success rates, and their relation to sustainability issues. In empirical practice all these sub-processes function separately and different modelling attempts also tend to concentrate on single aspects, for instance on how to best design innovation contests.

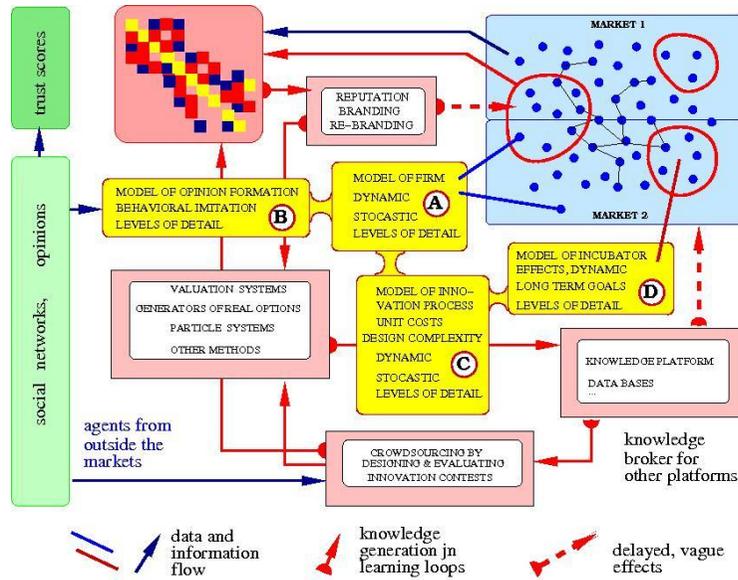


Figure 3: Real-life feedback loops in social learning connected to aspects of innovation, incubation and branding, and behavioural imitation central to sustainability issues.

In figure 3 finally we consider the real-life feedback loops within the process of social learning, entailing innovation (from figure 2), incubation, behavioural imitation and opinion formation, which are central to sustainability issues. These are real life processes occurring by means of more or less formalized mechanisms, differing in composition and, from industry to industry, coming in varying degrees of relative importance.

The figure distinguishes two contexts, namely the two markets with both independent and incubated firms, and, a more general, non-specific, “background” of social networks with agents which may belong to the markets. As innovation processes unfold, incubators and firms start a process of (mutual) trust formation, which results in trust scores (to what extent should firm i trust firm j ?), which may also help to evaluate firm j , for instance concerning for the stage of maturity it has reached within an incubation process. The evolution of trust scores is using information from the markets but also from the “background” social networks of firms. Trust scores are important in order to guide a behavioural imitation or a technological adaptation process. As incubators function like a kind of super-firms, but with a broader and more long-term oriented set of goals (see also figure 1), they are competing and cooperating with each other. The resulting reputation is an example of *social capital*, which may enter a more general assessment and valuation process indicated by the box “Valuation systems” of figure 3. This box contains an entrance named “generators of real options”, which highlights the fact that option models for many different scenarios of the stochastic innovation-incubation process may have to be created. Both, the reputation mechanism and the evolving knowledge platform (see also figure 2) do not exert an unconditional influence on market agents, and any possible effect may also be strongly delayed in time. Finally, crowd-sourcing by innovation contests, using agents from outside the markets, is also inherited from figure 2. The boxes from figure 3 named by encircled letters A,B,C, and D describe processes which can be modelled separately by using dedicated dynamic models. An evaluation would be done by way of (1) massively collecting data about past market-incubation interactions (about firms, incubators, sustainable technology projects, etc.) and (2) attempting to cluster and classify the data by using technological or other constraints, as is

described in general approaches to constrained clustering (Basu et al. 2009). A cluster would contain sustainable technology projects with favourable outcomes and another those projects with unfavourable outcomes for the involved firms.

4 Conclusions

We contributed to the conceptual discussion of a complex situation from economic reality, namely the innovation process in the presence of incubation while coping with the implicit societal pressure of adopting sustainable technology, without the latter being of short term commercial advantage to the single firm. We developed a concept for integrating incubation and sustainability issues into real-world process models but, simultaneously, also into a computational concept concerned with the question of how to assess and to value the complex stochastic process resulting from the incubation-sustainability relation.

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THE FORTIFIED CHURCHES FROM TRANSYLVANIA – HOW WELL ARE THEY KNOWN BY THE ROMANIAN CITIZENS?

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The Fortified Churches from Transylvania represent an important category of historical and religious sights of the anthropic touristic potential - historic cultural potential of this region. However, they are not exploited from a touristic point of view at their fair value, one reason being the weak promoting activity, especially the lack of information among citizens about the existence of these churches. In this paper, I intend to highlight on the information level awareness among the Romanian citizens regarding the existence of these churches, to identify which are the most well known and visited churches and to establish the profile of those who visit the churches.

In the end, the results of this research impose a set of measures to improve the level of information among the Romanian citizens concerning the existence of this historic and religious heritage.

The paper is relevant for the doctoral research project called “Marketing Places – religious and historical sights of touristic interest from Transylvania” under the guidance of Professor Doctor Marius Pop, Babeș-Bolyai University of Cluj-Napoca, Faculty of Economics and Business Administration, during 1st of October 2009 – 1st of October 2012.

Keywords: fortified churches, tourism, awareness, romanian citizens, research

JEL classification: M31

1. Introduction

Although Transylvania region has inherited a rich cultural and historical heritage, this legacy is not used to its fair value and a major part of residents and tourists are not aware of this potential. Through this paper I propose to demonstrate awareness regarding the existence of these objectives among Romanian citizens from different regions of the country.

Referring to previous studies in this area, although many papers were written in both national literature, but mainly in specialized international literature especially in German language, most of them treat the subject from historical, architectural or functional point of view and almost never in terms of tourism potential.

Further, in this paper a brief presentation of the fortified churches will be made, we will analyze the methodology and the research findings; develop proposals for improving awareness of the existence of these churches and present limitations and future researches.

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2. The Fortified Churches from Transylvania

Even though the Fortified Churches were built as defense systems with walls reaching 2m in thickness, sentinel passages, towers and surrounding trenches, most of them have significant religious value as well as demonstrating their builders’ skills in architecture, astronomy and the science of war (Mureșan 1998 : 33). These churches were built during the Middle Ages by the Saxons for protection and defense against Ottoman and Tatar invaders (Klimaszewski *et al.* 2010

: 98), central-southern Transylvania being the place where it is found a high density of this kind of objectives (Dezsi 2006 : 172).

Around 1600 there were about 300 such buildings, half of them being kept so far. Although this type of construction is found also in other parts of Europe (Germany, Austria, France and Nordic countries), Transylvania is one of the few regions where there are three types of fortifications:

- church with fortified walls - the church does not contain defensive elements, but it is surrounded by walls;
- fortified church - being the result of the application directly on the church body of the defensive construction, including one or more parts of the building;
- fortress church - is the case where the fortified walls are provided with fortified storerooms for supplies and fortified with towers, bastions and fortified warehouses, often being surrounded by a water channel, and the church itself is designed for defense.

Fortress churches or “churches citadel” are related to citadels, but they differ because they were not permanently inhabited, but only in case of war and siege. Supplied with food and grains, on site or even inside the church was almost always a well, so the peasants could survive long enough in these small fortresses. Transylvanian constructions are the most powerful and comprehensive, the Prejmer church (Braşov county) with three walls that contain 260 storerooms of supplies, being the largest European fortress-church (Fabritius-Dancu 1980 : 2).

As I already mentioned, on Transylvania region were preserved more than 100 fortified churches. In Figure 1, I tried to highlight the counties where these almost 150 buildings are located.

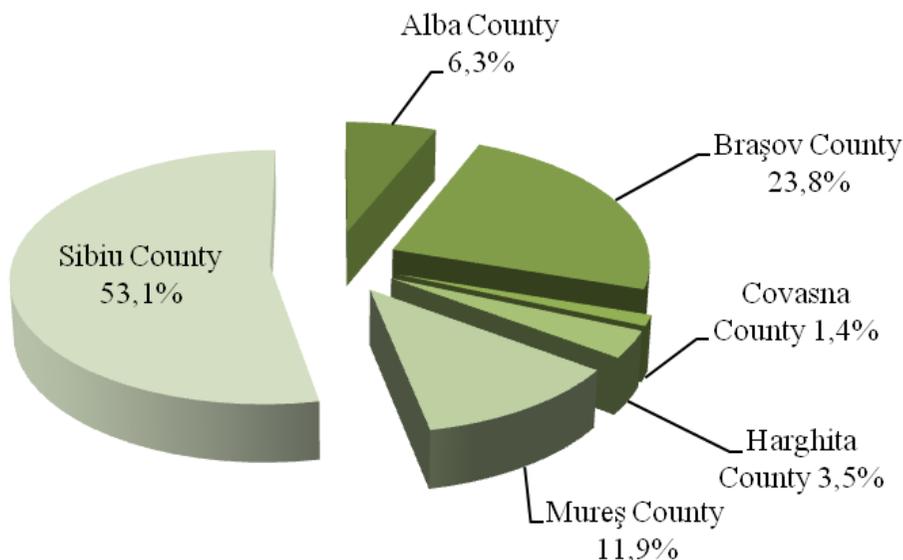


Figure 1. Distribution of Fortified Churches in Transylvanian counties
(Source: realized by author)

From these churches, a number of seven are listed on the UNESCO World Heritage List, namely: Biertan / BIRTHÄLM (Sibiu county), CÂLNIC / KELLING (Alba county), DÂRJIU / DERSCH (Harghita county), PREJMER / TARTLAU (Braşov county), SASCHIZ / KEISD (Mureş county), VALEA VIILOR / WURMLOCH (Sibiu county), VISCRI / DEUTSCHWEISSKIRCH (Braşov county), the best known of them being Biertan Fortified Church.

Even if I noticed that many authors include the cities of Braşov, Mediaş, Sibiu and Sighişoara in the category of fortified churches, I will consider them medieval cities and I will not consider them subjects of this paper.

3. Research methodology and results

3.1. Questionnaire and data collection

This paper was drawn up using the survey method and the questionnaire was used as a research tool. The data have been collected both through personal interviews and Internet. In the first situation, tourists and excursionists have been questioned but also residents of cities where interviews were held, all the respondents were chosen randomly. In the second case, the questionnaire was distributed via the Internet by e-mail addresses of known Romanian citizens, also chosen randomly, with the mention to send the questionnaire on their known e-mail addresses thus forming a network, finally all completed questionnaires being returned to the original e-mail address. At the end, 113 questionnaires were completed (70 interviews and 43 online). The questionnaires are realized only in Romanian language and contain two categories of questions: the first category tries to determine the awareness of respondents regarding the existence of these churches, information sources, visitors number, reason for the visit and satisfaction following the visit, while the second category tries to determine the demographic characteristics of the respondents: nationality, region of origin, age, gender, income, education and religion. Regarding the type of questions used during the research, the second category contains exclusively closed questions, while the first category has on its component both closed and open questions in order to not influence the respondent in one direction but to leave him the opportunity and freedom to list all churches that he/she heard about or visited.

3.2. Data interpretation and results

After processing all 113 questionnaires the following results were obtained:

From all approximately 150 existing Fortified Churches in Transylvania, 55 names were mentioned by 68,5% of respondents, 31,5% being unaware of any fortified church name. Figure 2 shows the most popular 21 names mentioned by the respondents, receiving a percentage of more than 1%, other 34 churches listed gaining just under 1%. It can be observed that the most well known is Biertan Church, achieving 21,9% followed by Cisnădie Church with 8,2% and Cisnădioara Church with 6,4%.

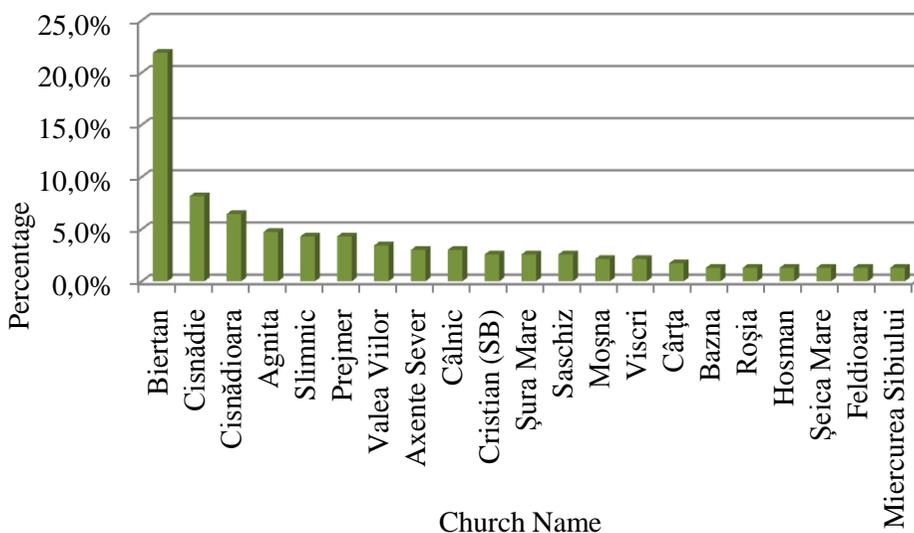


Figure 2. The most popular churches among the respondents
(Source: realized by author)

Regarding the visiting degree of these churches, only a percentage of 64,6% of the respondents had visited at least one of these churches. Figure 3 shows which the most visited churches are. Even if there were mentioned a number of 51 churches, only 19 of them recorded a visiting level exceeding 1,5% among respondents, the rest being below this percent. On the first three places among the most visited fortified churches are: Biertan Church (20,1%), Cisnădioara Church (7,4%) and Cisnădie Church (6,9%).

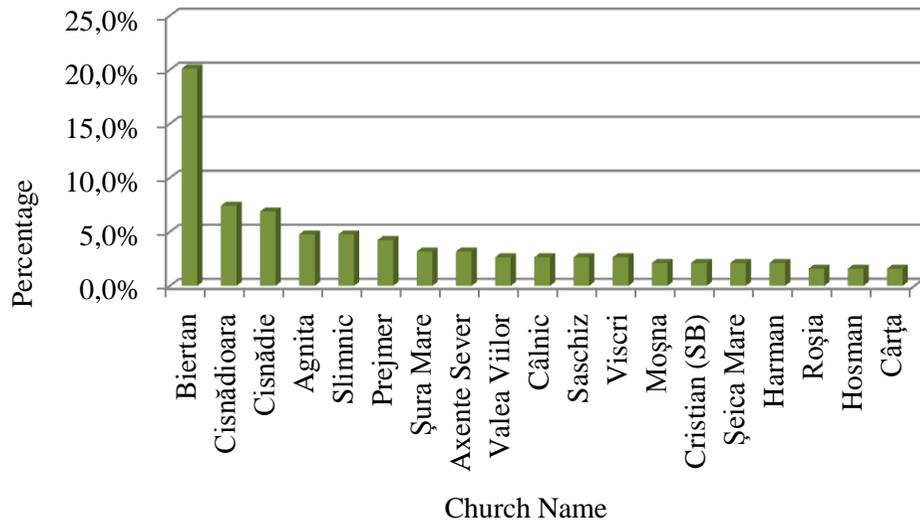


Figure 3: The most visited churches among the respondents
(Source: realized by author)

Regarding the reason for the visit, 44,8% of respondents replied that they made the visit for leisure, 19,2% due to a festival kept inside the location, 15,2% for cultural reasons, 7,2% were in school visits, 6,4% for religious reasons, 4,8% were in organized trips, 1,6% for scientific reasons and only 0,8% were gastronomic visits. As informational sources the friends record the highest percentage (51%), being followed by the touristic brochures (9,8%), travel agencies (2,9%), web pages of the sites (7,8%), as well as other informational sources such as family, school, history books, radio, tourist information points or occasional visits in percentage of 28,4%.

Among those who visited the fortified churches, only 12,2% chose to spend a night or more in the site, the rest of the respondents just doing a few hours or one day trip. But no matter the reason or visit duration, the high degree of satisfaction of respondents after their visit was noticed. Thus, 97,2% confessed that they intend to revisit or visit other fortified churches in the future and all respondents would also recommend these objectives to other persons.

Table 1 shows the visitor's profile. In addition to the features described in this table, it must be noted that 97,3% of the respondents are of Romanian nationality, the difference (2,7%) being of Hungarian nationality.

Table 1. Visitor's profile

Gender	%	Age	%	Income	%	Educational level	%	Religion	%
Man	44,2	< 18	0,9	< 250 euro	14,6	Primary studies	0,9	Orthodox	94,7
Woman	54,8	18-25	10,7	250-500	32	High school studies	16,8	Greek catholic	2,6
		25-45	70,5	500-1000	38,8	University studies	58,4	Roman catholic	0
		45-65	16,1	1000 <	14,6	Post university studies	23,9	Protestant	0
		65 <	1,8					Other	2,6

(Source: realized by author)

Regarding the respondent's county of origin, the highest percentage was recorded by the Sibiu county (42,5%), followed by Bucharest (12,4%), Mureş (9,7%), Braşov (8,8%), Alba and Vâlcea with 7,1% each, Argeş (4,4%), Dolj and Prahova with 1,8% and Bihor, Cluj, Galaţi, Gorj and Teleorman with 0,9% each. Figure 4 highlights the origin of the respondents.

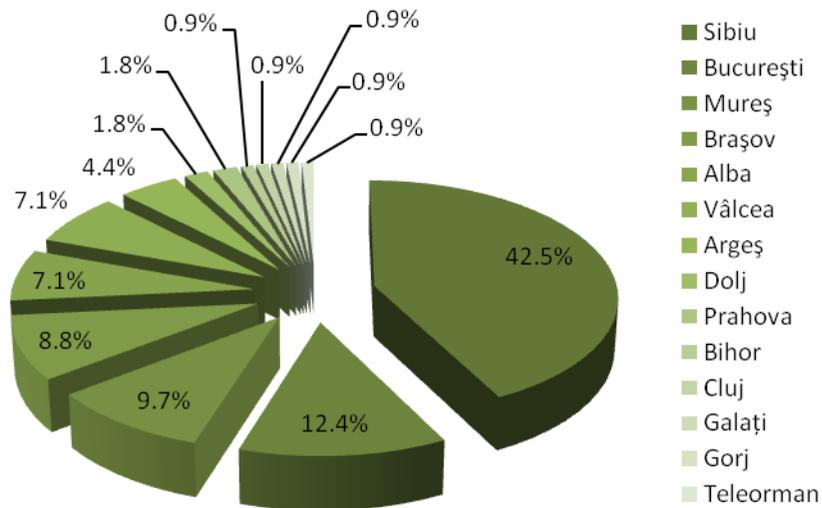


Figure 4. Respondents counties of origin

(Source: realized by author)

4. Proposals for improving the information grade

Based on the information sources listed by the respondents who have visited at least one of these fortified churches, we can say that one of the main sources of information used, except the friends' recommendation, is the promotion of these sites in the media. Thus, a first recommendation would be to improve media communication nationwide (television, radio, newspapers and Internet) by TV broadcasting and issue articles that could tell the "story" of the place, highlight its history, architecture, construction and its role in order to raise the interest of the audience regarding the existence of the place and awake the desire to visit it.

Considering the reasons for which the respondents visited these places, we can develop the following proposals:

- more festivals should be organized on those locations. During this research it was noted that 19,2% of people who have visited at least one fortified church, made the visit due to a festival which was held inside or near the location. In this category, we can mention the International Theater Festival in Sibiu, which has representations inside the Cisnădioara Church also and “Transylvania Fest” which has brought about 3,000 visitors in Biertan in 2010.
- promoting the fortified churches more as historical and cultural sights rather than religious objectives. This proposal comes from the finding that 15,2% of respondents had visited at least one church for cultural reasons and only 6,4% for religious reasons. Also, during the interviews we received rejections from some feasible respondents, arguing that they are Orthodox and they are not interested in visiting the churches belonging to other religions.
- introducing special courses in primary school and high school as well as school trips who’s aim is to basically inform about the existence of these historical and religious objectives.
- organized trips proposals from local and national travel agencies which contains routes that include these fortified churches.

Starting from the assumption that these fortified churches are a true national treasure, I believe that for their promotion and capitalization should exist a close cooperation between public institutions and private touristic sector.

5. Limitations, conclusions and future research

The main limitation of this research is the fact that it was not cover the entire country and the number of respondents was not balanced for each county. Another limitation is the online survey. Although it has been distributed more than 300 questionnaires all over the country, only 43 were completed, the reasons of not filling them might be: the lack of time, indifference to the subject, not access the e-mail account for a time period or others. Also, on-line questionnaires were conditioned by access to a PC or Internet. It was noted however, that 84% from all respondents are aged between 25 and 45 years old while 16% between 45 and 65 years old, and regarding the studies, 92% have university and post university studies and only 8% had graduated high school. In regard of “face to face” survey, this was limited by the access of interviews operators in different parts of the country in a given time. Thus, as observed during the paper, the majority of the respondents are coming from Sibiu county, and this has a direct link with the related result, namely that the most visited fortified churches are also found in this county.

Since only 55 name of fortified churches were known by only 68,5% of respondents, the difference of 31,5% knowing any names from this category and only 64,6% have visited at least one of these churches, can concluded that these religious and historical sights of touristic interest are promoted, but not enough. The same conclusion is reached also from the fact that the main source of information is the recommendation of friends and family and the questionnaires show that, as the respondent comes from a much distant county of southern Transylvania, is much less informed about the existence of these churches.

Regarding the future research, I propose to extend this study in order to include all the Romanian counties, the questionnaires being completed by an equal number of respondents in each county, and in this way it will be obtained results much closer to reality.

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THE SAVING AND INVESTING CONSUMER BEHAVIOR ANALYSES ON THE ROMANIAN FINANCIAL MARKET

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This article aims to provide an analysis of the saving and investing consumer behavior, that where researched in a time of changes after a severe financial crisis. The analyses purpose was to determine the reasons, or the way that the reasons would change, for buying different financial instruments, and also the way that the consumer perceives investing and saving. Different demographical characteristics and their influence on the financial behavior of the consumers were also studied. The investor behavior on the developed markets is being studied carefully for many years. The need to create financial products for each customer type, such as Generation Y, intensely investigated by various research teams, in different ways, resulting in different characteristics such as general proclivity to the marketing, advertising, consumerism, branding, environmental issues, fashion and even anxiety begins to be felt also on the Romanian market. So, to better understand the actual degree of knowledge that the consumer have on the concepts of saving and investing and on that activities involved into this concepts is a very important step of the research. The research method is a survey based on a sample chosen with the simple random method undertaken in 2010. There were gathered 480 questionnaires. Research is not a statistical nationwide representative because of the lack of the financial and human capabilities. We expect that the methods of "investing" that are most known and used to be bank deposits because in Romania the risk appetite is a low one. The people's appetite for saving activities we expect to be motivated by the need for purchasing consumer goods, and eventually buying a car or a house but not the desire to accumulate capital by making real investments such as those in financial assets. An important factor for the decision to invest should be a higher income and also the family structure. Study could be interesting for researchers because it offers an opportunity to view an analysis of the customer behavior on the financial market. The research instrument is complex, the mix and the large number of question should provide an accurate image of the way the Romanian consumer of financial products think and act on this market. The study also helps to understand consumers' needs for practitioners, because this field is not a largely researched one. The originality of this article is given by the manner in which the questionnaire was made. The battery of questions, including a series of „likert” question, it should provide an accurate mirror of the know-how the Romanian consumer of financial products actually possess, the reasons on with their behavior is based on, and what are the most important characteristics that influence the purchase behavior.

Key words:

Consumer education, saving, investing, marketing research, financial market

JEL Classification

M31

I. Introduction

Understanding consumers is the core of marketing effectiveness, and yet this understanding in the financial sector is quite limited. For many potential consumers financial services are not a very interesting acquisition, being perceived as an extremely complicated one. The potential consumers often have difficulties to identify differences between a financial product and other. At the same time consumers are finding it difficult to make the products assessment before

purchase therefor when they actually decide to purchase they might perceive very high degrees of risk. Because financial products do not generate consumer happiness, sometimes being perceived as a factor of reducing pleasure consumption, are often seen as "exhausting shopping" (Ennew and Waite 2007: 128). According to Kotler any economic activity should aim to meet demands - actual and potential - customers with maximum efficiency (Kotler 2008: 4). Orientation towards the needs of the consumer business, the meeting, must be based, a thorough knowledge of these requirements, systematic tracking and even anticipating their scientific (Cătoiu and Teodorescu 2004: 13).

II. Literature review / previous research

As Fanelli and Erlich say in their study, financial means money and money means an extended emotional baggage (Erlich and Fanelli 2004: 7). Individual attitude toward money is an extremely emotional one. Unlike consumer goods when taking the decision to purchase a financial product you do not buy one brand but rather rely on the advice of financial intermediaries in the final decision (Lewis 2008: 105).

Stafford, Lusch and Kasulis suggests that individuals can purchase all types of financial products in a specific time, however products are purchased for longer periods of time in such a way as to satisfy the utility function. They also say that sometimes consumers must not only decide between various alternatives of spending the money, but also if to acquire or to save the respective amounts (Stafford, Kasulis and Lusch 1982: 397).

In the literature there are treated different reasons for saving based on Keynes eight saving reasons including "Precaution" that means ensuring a reserve against unforeseen circumstances, "Foresight" which includes insurance against possible events such as the differences between revenue and expenses or the "Calculate" which means raising money in order to earn interest (Keynes 1936: 78). Wärneryd mentioned four reasons of saving based on the need to save as "a continuous habit", "precaution", "bequest reason" or "profit motive" (Wärneryd 1995: 28). Other reasons for saving aimed "retirement", "holidays" or "rainy day" (Harris, Loundes and Webster 2002: 207).

In the article we aim both to determine which the main reasons for saving are and also to see the perception of the interviewees over the preferred investment instrument. From we might be able to realize a characterization of the potential financial products consumer.

III. Methodology

Right from the start we stat that the research is not conclusive, but an exploratory one. As a research method chosen was to achieve a survey. The questions were introduced in an omnibus-type research carried out in summer 2010. The research carried out in 2010 was based on the results of another research driven in 2009 and the research tool has been improved based on its' results analysis. Research is a doctoral research type from here the small number of questionnaires and statistical unrepresentative degree. 500 questionnaires were applied and 478 among of them entered in the analysis.

Study objectives are:

1. Perception research on the concepts of saving and investing;
2. Determining the motivation of saving-investment in our country;
3. Determining the characteristics of people with a greater appetite for investment;

Assumptions on which we left were the results of the previous research, namely that the people knows the concepts of saving-investment but for different reasons, particularly lack of money does not have a coherent investment behavior.

IV. Results

We left from the research purposes, namely to describe the behavior of consumers of financial products focusing on the analysis of Likert-type questions.

To answer the first objective has been made a series of two closed questions as to the meaning that respondents gave to the concepts of saving and investing. Thus 66% of respondents see the savings as a reduction of expenditure, 20% see savings in terms of its definition namely “that part of disposable income that has not been used to purchase consumer goods but was accumulated for a use later” (Ennew and Waite 2007: 35), 12% are saving for “the safety of tomorrow” for “rainy day” and 2% say they save through energy efficient equipment.

Regarding the concept of investment is more clearly known, more than half of respondents understanding by investing the multiplication of money. 18% mean by investing to put money into a business, and 8% see investing through the acquisition of property and land, also very close idea of what the concept means from economic point of view. 12% see investing as a means to improve their own or children education and 10% as a way of purchasing durable goods for the family.

The need for security, from the viewpoint of the respondents is the most important, over 50% of respondents nominating it as the main reason for saving. Other reasons for saving 15% think the help they can give their loved ones and 30% save for future purchases such as houses, cars and durable objects. (Fig. nr. 1)

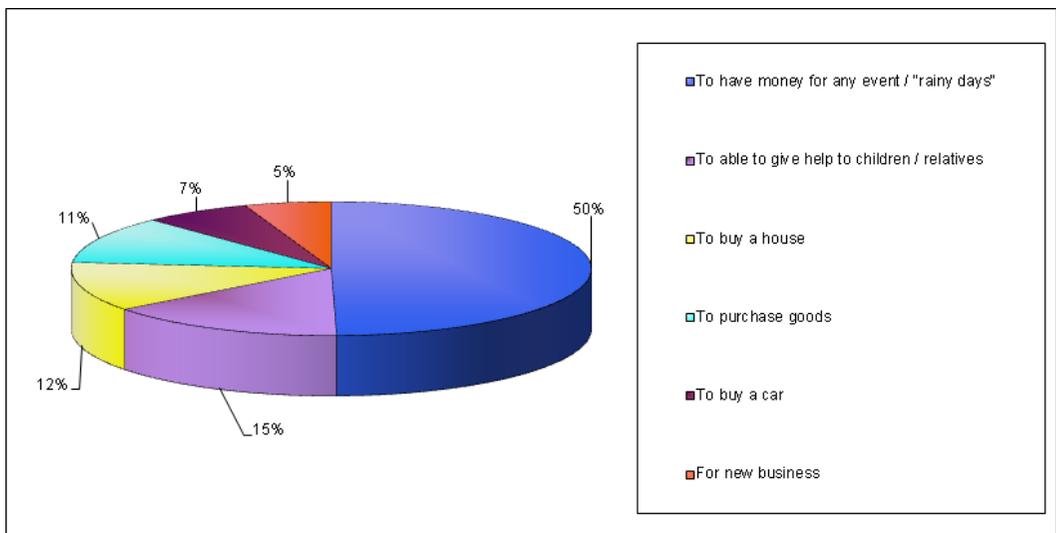


Fig. 1: Which is the main reason for saving? (made by author)

From the research presented by Canova results that Europeans save at a rate of over 40% also for security reasons, but here things are changing, almost 39% saving for themselves “for their own respect”, to give children help save nearly 8% and shopping (purchases) reasons only 3% (Canova et al. 2005: 21). These differences may come both from our communist past, we were deprived of many goods and now we need to compensate those shortcomings, or that we are a poorer society and we want to ensure a safer future for us and for our families as well.

Paas argues that there is an order in purchasing financial products that consumers tend to respect. Thus, deposit accounts will be acquired before investing in mutual funds and ultimately will turn their attention to investments in shares (Paas 1998: 353).

This is verified in our research also, by far the most used means of saving / investing are collaborations with banks, nearly 65% of the responses, nearly five times more than the response that ranks 2nd place 14.4% real estate investment. Investments in shares and bonds collected only

3.8% of responses, while investing in the futures market are only 0.6%. This shows that Romanian market is an undeveloped financial market, which is true from our point of view.

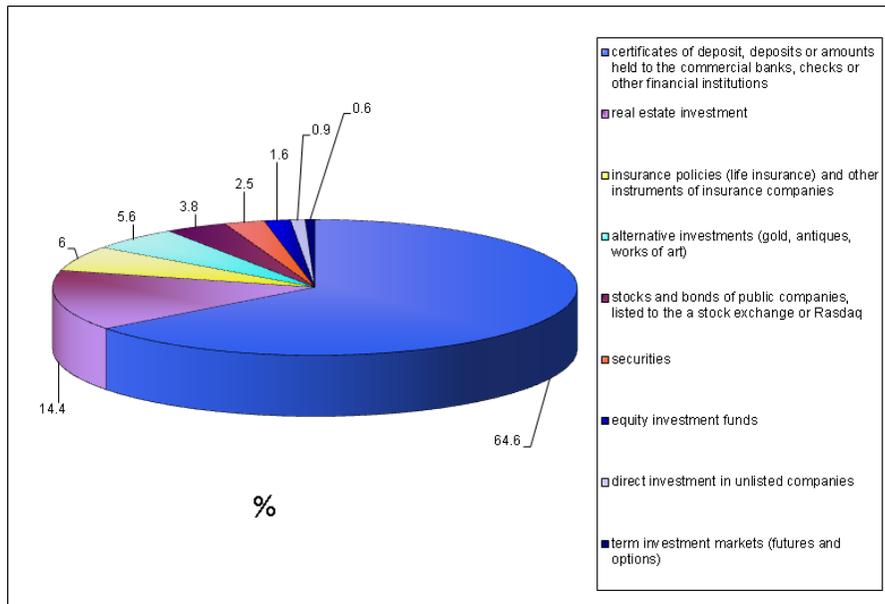


Fig. 2: The preferred investment mean. (made by author)

If we consider the preference for banks and securities rather as savings instruments and for real estate, insurance, alternative investments, stocks and bonds, investment funds, direct investments and term investments rather as investing instruments, we can say that the studied population is rather orientated towards savings then investing, further confirming the need for security. In research we've added a battery of Likert statements on preferred mode of investment. We have shown in the graphic below (Fig. no. 3) the responses of those who chose as the preferred instrument means orientated towards saving and also the responses of those who chose preferred instrument means orientated towards investing. We split the responses and said that ones have savers thinking and others investment thinking, meaning savers and investors for easier saying.



Fig. 3: The statements mean on to the preferred mode of investment (made by author)

Thus savers say they found it easy to choose the way of investment, while investors registered a slightly positive score. Greater risk was found to investors than to savers. Also, the investors and the savers say that the investment has justified the risk taken, but investors have a score almost double registered. With regard to investment earnings, the data do not differ greatly between investors and savers. The answers to this question also obtained the highest score of all questions, showing that those who have made decision in different forms money placement they had over all won, however, no massive losses registered. In front against the expectations of earnings, investors' responses were placed almost exactly on the score of 0, following and frequency distribution, we can say that there is an almost equal division between the earnings that exceeded expectations and have not exceeded their expectations. Instead savers say these gains haven't exceeded expectations. And yet they will use the same method of investing while investors are not so keen. In terms of emotions seems investors are slightly better, they say that they hadn't registered any emotions with the chosen instruments although the risk was higher. Meanwhile savers say they had some emotions regarding the earnings. The last statement is a bit bizarre, though savers said they would call the same method of investing any time they declare that in the specific period of time they could choose something more profitable. It looks as they might have studied the market and had information on more profitable instruments but the need for security is the one that conduce their decisions. Investors in turn say they couldn't have chosen something more profitable. Taken the statements mean on all demographic groups shows that men say it was easier to decide how to invest than women, that young people between 18 and 25 with those over 46 years has been slightly easier compared with those between 26 and 45 who looked more profound. Well-educated people and those with post graduate school say it has been easier to choose than those with only school and college. An Interesting response is the one depending on household income, those with low incomes and those with incomes between 5,000 and 7,000 lei says it was probably easier to pick each for different reasons. The hardest part of it was 7,000 lei, although less in number, investment amount was probably a bit higher and the decision was taken very responsibly. Those who live with their partner, without being married has been the hardest decision to invest in the easiest parts have been those who are single now but had a divorce or widow experience. Those with children have been harder to make the decision to those without children. In terms of occupation, although we do not have enough cases for more classes we can say that, senior civil servants or those with leadership experience have been most difficult to choose. On the other hand students and pensioners have said it was easier, here is probably an indirect influence on income levels and of the chosen instrument not of the position itself. Between Bucharest and the provinces there are not notable differences between the two groups. Regarding the issue of risk, was perceived more higher by women, those between 36 and 45 years and more than 65 years, the school only and those with low incomes, those living with a partner without being married, those with more children, managers, and rather the province. For the statement regarding justify on risk taking, women more than men inclined to be agreed with this statement, like those between 36 and 45 years and those who have as the last school graduated the school. In terms of incomes, those with income between 3501 and 5000 lei recorded the highest score, the lowest being recorded by those with incomes of more than 7,000 lei. Those living with a partner without being married to the greatest extent in saying that the investment has assumed the risk taken and the lowest score is given by the divorced and widowed. Those who are in a greater measure of agreement with this statement are those who have two children. Generally those with children recorded higher scores than those without children. Officials and senior administrative officers and managers, as well as students and even unskilled workers believe that the investment justified the risk taken compared with pensioners, workers and technicians operatives. The province agrees to a greater extent that justified its investment risk than those who are in Bucharest

For the statement “The investment recorded gain”, men are more able to disagree with it, as well as the very young and the very old, those with high school, those with the lowest incomes, those who are living with a partner, those with two children, senior officials and managers, students and people in the province.

For the next statement, that the level of earnings exceeded expectations, we can say that men are easier to please than women, also satisfied are those over 65 years, those with only school and those with revenues between 2001 and 3500, those divorced or widowed, and those with children. At the opposite pole are those with incomes over 7000.

Those who would call the same method of investing are men, those aged between 46 and 55 years, those with post-graduate studies, those with revenues between 5001 and 7000, although those living with a partner but not married, those with one or two children, senior civil servants, managers and students, and those from the province.

Emotions for the earnings had older men, those between 56 and 65, those only with school, those with incomes between 3501 and 5000 lei, those living with a partner without being married, and those with more than two children, senior civil servants and managers. From this point of view there aren't differences between Bucharest and the province.

Regarding the last question, that concerning the possibility of investing in something more profitable. Men are only slightly more determined than women in this regard. Those over 65 years recorded the highest score, those only with school, those with earnings above 7001 lei, those living with a partner without being married, the childless, specialists with intellectual and scientific occupations and with very little before those in the province.

V. Conclusions

The research carried out showed that Romanians have a financial education on average. Roughly know the concepts of saving and investing. As reasons for saving the forefront lays the need for security. As the preferred means of investing, over 60% of respondents chose bank deposits. Another conclusion of this study is that Romanians invest what they have especially in consume, products and daily living needs swallows almost all the resources they have. That's why people spend money on consumer products or if they have patience and ambition to save for a "good investment" in the future, perhaps a house or a car.

The analysis of responses to Likert questions arise as though the mentality of investors are fewer in number, as expected, the profile and their responses are not very different from that of the savers. We expect them to have more aggressive responses, in turn observe answers only slightly different from those of savers. We can draw such a conclusion that investors still have a very low appetite for risk. A profile still looming, the mentality of investors are more likely male, younger, unmarried and without children with income above average with a job with responsibility. And those with savers mentality are rather family man, with children, being in middle age.

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THE IMPACT OF THE 21ST CENTURY FOOD MARKETING ON CHILDREN'S BEHAVIOUR

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This paper aims to raise a question mark regarding children's food habits in the last decades in Romania, and how globalization, marketing and advertising influenced and changed our old romanian food preferences. We will highlight that children spent a lot of time watching TV, choosing a cartoon character, or an advertising star on the same age as him/her as a model, and then copying their behaviour, and acting like them. So, they have the idea that they will gain their parents' love and their colleagues appreciation.

The rise of obesity is one of today's biggest societal challenges. Thus, to halt obesity has become a goal in several political sustainability strategies. The focus is on children since their health behaviour is expected to have a strong impact on consumers in adulthood. To fight childhood obesity, the challenge is to develop the 'right' policy toolbox. One complicating aspect amongst others is the numerousness of actors involved. To find a policy mix and assess its consequences for all actors, it is essential to understand the underlying mechanisms – the impact of external and internal factors on children's health behaviour. Tools such as regulation, information and education appear to be insufficient to curb this unsustainable consumption behaviour.

Keywords: food marketing, advertising, children, gatekeepers, ethic code

Jel code: M31

1. Introduction

Marketing and advertising to children has been growing exponentially in Romania during the last two decades, and corporations spend billions each year trying to influence children's brand and product preferences. After the *Ethic Code for Advertising Adressed to Children Referring to Food Products* signed in 2008, marketers have aggressively targeted children although the code is not in favour of using children for promotional purposes.

World Health Organization (WHO) figures show that worldwide, over 1 billion adults are overweight and around 300 million are obese (Obesity is assessed using body mass index (BMI) above 30 kg/m² and represents the upper tail of the population distribution of BMI). Over the past 30 years, the frequency of overweight children has tripled (Miller, J., Rosenbloom, A. & Silverstein, J., 2004). While governments' influence on changing individual consumption behaviour is limited and needs a long-term commitment, a more promising approach is to actively design the consumption contexts people live in: the food and drinks offered, the marketing and advertisements contents broadcasted, the walkability and bikeability of cities and so forth. Urbanized consumption environments today have been coined as being 'obesogenic', i.e. containing stimuli that encourage obesity (Lobstein, T., Baur, L. & Uauy, R., 2004).

The present paper treats aspects related to the ethical food marketing to children and the social responsibility of food marketers. Based on research, the responsibility of the childhood obesity can be placed on children, parents, schools and food marketers, who all contribute to this problem in some way. Children are consumers today and will be the buyers of tomorrow. Companies are following the idea:

„sell these children on your brand name and they will insist that their parents buy no other”. This is the generation whose children are sicker than their parents. Why? One reason is the excessive consumption of sweets, fast food and lack of exercise.

Advertising and marketing to children is not legal, according to the *Ethic Code for Advertising* and RAC (Romanian Advertising Council) (<http://www.rac.ro/cod>), so the question that arises in this case, food marketing in particular, is: is it ethical? And if it is ethical, are marketers responsible for misleading messages in adverts and what are the responsible ways of selling food products to children? What are the responsible ways of promoting products for adults without influencing the child through television?

Advertising on TV aims to stimulate demand compliance strategy, namely pull strategy. Pull strategy (to attract) involves marketing activities, especially advertising and promotional marketing, targeted end-user (in our case, the student aged 8 to 12 years) and intended to make it apply to products at intermediaries (parents, grandparents), thereby causing the latter to demand services from providers (the company who paid for a TV spot and that is advertising). Attraction strategy is demand-driven, aiming to create or increase them. The goal is to provide enough information to attract consumers.

Having a picture of the current landscape with regard to food advertising to children is essential as the country moves forward in the effort to combat childhood obesity. If we overestimate the presence of food marketing in children’s lives, or its role in their diets, we may place too much faith in marketing-oriented policy solutions; if we underestimate it, we may neglect important policy options.

Government agencies and advisory bodies have faced frustrating obstacles in getting the data they seek to help inform their deliberations; it is the purpose of this paper to help fill at least some of the gaps in their knowledge, and to provide a benchmark from which to measure future changes in the food marketing arena.

The study answers a series of fundamental questions: How many food ads do children see on TV today?, What types of foods do they see advertised most frequently?, What is the nature of the appeals used to market food to children?, What proportion of food ads model promote physical activity?, How often do food ads include a “push” to company websites?, What proportion of food ads use health benefits as a primary appeal, or offer specific health claims?

2. Background / existing international action

Children today watch television more than ever and are therefore they are more bombarded with advertisements. Research has shown that children are capable of storing and remembering many of the ads you see on TV, whether they are for toys, food and cars. Advertising agencies spend billions annually for advertising aimed at children, but in what sense? Studies show that children only need a view of a commercial ad to develop a preference for a particular product and that this preference is reinforced by repeated exposure. It is not just the goods that address their children are remembered, but also products for parents. One study found that children bombarded with junk food ads eat up almost double unhealthy snacks and sweets compared to the amount consumed by a child who has not seen those ads. Those who are already overweight or obese are most sensitive to food advertising. Nutritional choices made by parents and children depend on many factors. Studies show that one of these factors may be advertising to children. These studies reveal that advertising can attract children's attention, can influence their choices and can encourage them to determine, in turn, their parents to buy certain products. Over the last few years, major international food and drink companies have introduced a number of new policies and pledges covering the marketing of their products to children. This research aimed to look beyond the headlines to see what the companies have actually committed themselves to. Analysing food and drink company policies on the marketing of food to children is a complicated

and, at times, confusing undertaking. Is often what is not said, rather than what is said, that is significant. Brands like Unilever (*Left Wanting More, Food Company Polices on Marketing to Children Report*, part of *Junk Food Generation*, downloaded from www.junkfoodgeneration.org on 6th Aprilie 2011) do not have a global policy and rarely a regional policy, however some of them have signed a commitment (*Ethic Code for Advertising in Romania*) which gives them credibility in front of the parents and teachers that they would not target their products and beverages to children. However, these companies and other just like them use indirect form of advertising to children, teasears as "come to KFC", "I'm loving it" etc, use children in their advertisments and create the idea in the mind of a child between 8 to 12 that the product is nutritional for aparently peculiar reasons.

The European Commission (2007) notes that parents having the main responsibility for their children should be able to make informed choices and transfer their knowledge to their offspring. Obesity prevention actions are undertaken by the Romanian Government Programme "Cornul and milk" and in June 2009 the Romanian Advertising Council (RAC) is the depositary of the Ethic Code for Advertising to children on food. Thus reports of problems treated by this code fall under the RAC and are considered by it. Code of Advertising Practice (hereinafter "the Code") was prepared by the RAC in order to use advertising to inform public opinion in Romania fairly, honestly and decently, respecting both national laws and principles of advertising practice internationally recognized both in form and content made by the International Chamber of Commerce (<http://www.rac.ro/cod-produse-alimentare3>). Companies that signed the code dedicated themselves to responsible advertising of food and non-alcoholic beverages to support parents' efforts to promote healthy lifestyles. As such, the companies agreed not to advertise food to children under 12 years old, except for products that meet specific nutrition criteria based on accepted scientific evidence and / or national and international nutritional guidelines. The purpose of this initiative, "Advertising to children under 12 years old" means advertising in a program with an audience of at least 50% of children aged up to 12 years. Companies also undertook not to carry out communications relating to products in primary schools, unless they are specifically required in setting the school administration or educational purposes.

3. Influencing factors: empirical evidence of determinants of obesity

Children tend to copy the behaviour of somebody they like or somebody they see often. Since they watch TV a lot, as the results of the questionnaire sustain, their role models are chosen from what the TV is offering them to watch. If another child is used in an advertisement on the television for no matter what product, food, toys, beverages and even banking, the child who watches the advertisement will begin to consider the child in the advertisement "cool" because he appears on TV and is enjoying the love of the other characters in the ad or has a disered toy or sings a nice song while advertising a product.

So, marketers are betting on a quick transfer of sympathy, respect and reputation of the company star, unlike the version that these perceptions were done by the power of communication of ideas. The public is emotionally attached to a star / celebrity and credited with credibility. This way to attract audiences by celebrities is successful and subconsciously the child wants to be like them, have more in common with them, have the family in the advert etc. Another aspect for which children tend to remember the advertisements, to desire the product, to ask their parents for it, is related to what the celebrity or the mascot in the ad represents for him. If the children see advertising that promotes a highly criticized product, unhealthy appreciated by parents, teachers, other children and child itself, being recognised for its sports performance, healthy lifestyle and so on, children will desire believing the product gives him / she the features, skills, reputation of the celebrity. We have identified four influencing factors determining obesity between children of 8 to 12 years old:

Parents as gatekeepers

As far as children are concerned, the major responsibility for obesity lies with their parents and families as well as with secondary socialization agents such as caretakers and teachers; all mentioned act as gatekeepers. Parents are working long hours, spend less and less time with their children, try to involve them in as many activities as possible and therefore nutritional aspects often left aside. The child feels distant or alienated in front of his parent and the parents give them whatever they want to gain the child back.

"Parents say they feel in conflict. They want to say no, but they don't want to have their child upset with them" (Zoll, M.H., 2000).

Spending allowance

Children today experience an increased spending autonomy. Children are free to buy from the school's shop, for example, whatever they want. Our research reveals that children in the third and fourth grade, who already know to calculate, receive money from parents to buy themselves sweets, sodas, chips, candy and so on. Even though, school shops are not supposed to sell unhealthy foods and beverages, such errors occur, so 55,55% prepare their school food at home and 44,44% buy something from the school's shop. However, children in the first grade choose to prepare their own school meals at home in proportion of 73% , the rest of 27% buy chips, soda and candy. The preferred acquisitions are chips, gum, popcorn with cheese, candy. Non-structured interviews with parents reveal that most of the children receive every day between 3 and 10 Ron.

A modernized food environment

The food industry, retailers and restaurants are considered as important actors in the matter of childhood obesity. They shape the context in which food choice takes place. For many years, it has been debated whether consumers actually use the nutritional information provided on the package at all and if yes, which of the competing systems is the best. For instance, information about included fat seems to make consumers choose lower fat alternatives. Latest research has shown that consumers do indeed use provided health-related on-pack product information – such as General Daily Allowances – but only if it is easy to understand and eye-catching.

Modernized food marketing

The food industry has increased the number of channels used to advertise their products to children. While television is still an attractive medium for the small children and advertisements are a successful strategy for brand building, online marketing such as 'advergames', in-school marketing and sponsoring, as well as toys and games produced in association with food producers are increasingly used (Wansink, B., 2005). To increase consumption, marketers create positive attitudes for their products and try to channel social norms of parents and children – i.e. for instance shared beliefs about health behaviour – by strengthening already existing behavioural patterns and convincing consumers of the product's benefits. Experiments suggest that food branding changes children's preferences in favour of the branded food (Branca F., Nikogosian H., Lobstein T., 2007). This is problematic since the majority of advertised foods are snacks, soft drinks and sweets that are high in fat, sugar or salt.

4.Objectives and Methodology / research

According to the study *The Impact of Advertising on Parents and Children* conducted by the IMAS and the Center for Media Studies and New Communication Technologies (CSMNTC) (published in *Jurnalul.ro* on 29 June 2010) commercials are viewed by 75% of the 6 years old children. The proportion of those who watch advertisements decreases, however significantly with age (<http://zibo.ro/planeta-blog/alimentatie-sanatoasa-10/Influenta-reclamelor-TV-aupra->

alimentatiei-copiilor-55). It is estimated that the percentage of children viewing TV commercials aged between 8 and 12 years is around 50%. According to CI (*Left Wanting More, Food Company Polices on Marketing to Children Report*, part of *Junk Food Generation*, p. 10, downloaded from www.junkfoodgeneration.org on 6th Aprilie 2011), several companies define a child audience as comprising more than 50% of under 12, meaning that large numbers of children may still be exposed to their marketing.

As their participation in consumer markets has grown, children have become increasingly attractive targets for advertisers. This is partly driven by their high media use. All questioned children watch television and 90% of them do not miss the prime time hours, exposing themselves to a variety of advertising.

We have chosen to focus on what we feel is the most influential culprit of the four factors, food marketers, since we believe food marketing campaigns are harming the lives of children by presenting misleading messages. Within two days we analyzed advertising clips for food and beverages for children aired during prime time. After personal observation we concluded that high in fat and sugar products (dairy, cereals and sweets) are pursued in 30% of the advertisements. While foods such as full grain, fruits, vegetables, vegetable oils, nuts conspicuously missing from the commercials (between 1% and 5%). Therefore, commercials encourage the opposite diet recommended by doctors.

<i>Tabel no. 1. Children's exposure to food advertising on the TV, on average</i>			
Age	Number of Food Ads Seen per Day*	Number of Food Ads Seen per Year	Hr: Min of Food Ads Seen per Year
8-12	90	32850	30 h
*between 07:00-22:00			

On average children are viewing 90 advertisement regarding food and beverages in a single day (an advertisement is seen more than once), therefore a child watches 32850 commercials per year taking into consideration an advertisement lasts around 01:09 minutes. Given the amount of time they spend watching TV each day and the mix in programming and networks that they view, children ages 8-12 see an average of 98:10 minutes of advertising a day for all products (toys, food, media, and so on).

Appeals used in food ads targeting children or teens

Among all food ads targeting children and teens, the most common primary appeal is taste (34% of all ads), followed by fun (18%), the inclusion of premiums or contests (16%), and the fact that a product is unique or new (10%). Two percent of all food ads targeting children or teens use claims about health or nutrition as a primary or secondary appeal in the ad, while 5% use energy as a primary or secondary appeal.

<i>Tabel no. 2. Other attributes of food advertising to children 8 to 12 years old</i>
22% include a disclaimer (e.g., "part of a balanced diet")
20% promote a website
19% offer a premium
15% portray an active lifestyle
13% include at least one specific health claim
11% use a children's TV or movie character
7% feature a contest or sweepstakes

Children of all ages are exposed to a substantial amount of advertising for food and beverages, but their exposure varies significantly by age. Because children 8-12 watch so much television, and therefore see so many food ads, they may be the group most affected by food marketing.

This is also likely to be an especially important age for the development of children’s food habits, since they are likely to have more time away from their parents, have their own money, and have more opportunity to make their own food choices. Therefore, policymakers and industry leaders may want to pay special attention to advertising seen by tweens.

1. Limits of the research

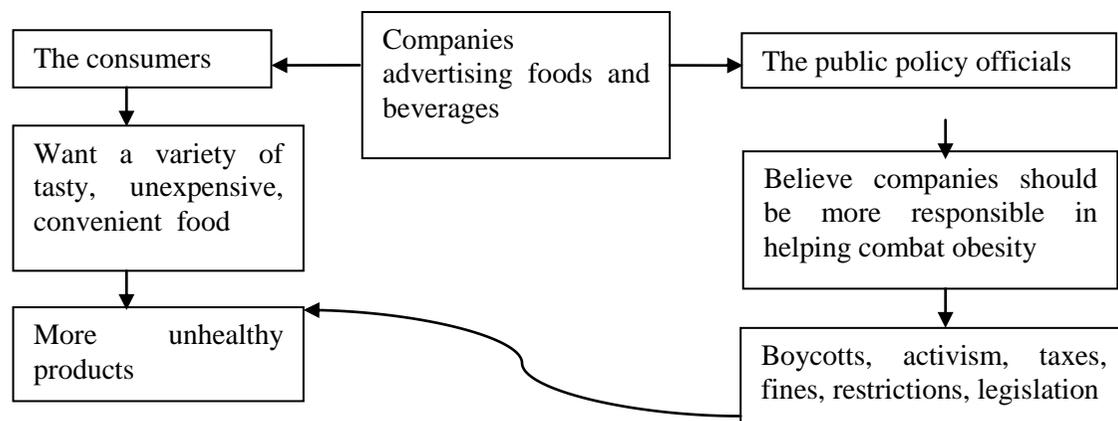


Figure 1. The Vicious Circle of Demarketing Obesity

Although companies say they cater to children’s biological interests, companies have recently been accused of contributing to the growing problem of obesity. The child’s desire for fast-food and other non-nutritious foods, desire induced by the company selling the unhealthy product, leads to the production of more unhealthy products on the market and therefore more promotional actions for unhealthy food, more actions from the public policy officials leading to more taxes, fines, restrictions and so on and so forth, altogether creating a vicious circle.

This study does not address the issue of whether food advertising to children on TV is going up or down, nor does it address the issue of whether such advertising influences what children eat, or should be in any way restricted, either through voluntary industry efforts or through regulatory policy. What it does indicate, however, is that food marketing is a predominant part of the television advertising landscape for children and that young people’s exposure to such messages is substantial, while their exposure to countervailing health messages on TV is minimal.

5. Conclusions

The factors presented above are valuable starting points to change young consumers’ behaviour into a healthier direction. While the goal to reduce obesity is broadly accepted, the motives, strategies, possibilities and dependencies of the various actors in the food system and in food and health politics differ. In the following we argue that policy actions are necessary, but that they can only be effective if all stakeholders support these policies with the means in their reach.

Solutions – developing profile clusters of ideal consumers and by discovering why people like the foods they like, effective dietician can find similarly predisposed people and help them develop the same mental map for that feed.

Although it is easier to target tastes than to change them, there is some opportunity to help consumers learn to like new tastes. People can be fairly suggestible when it comes to food moves. If the name sounds bad, it will bias taste. As long as a food is of at least moderate quality, the better the description, the better the taste. In general, however, when trying to encourage change in habits, it is easier to encourage small, infrequent substitutions when introducing new foods. It is easier also to target opinion leaders and nutritional gatekeepers, than to target everyone. Good cooks, for example, have a tremendous influence over the eating behaviours of the family.

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THE ROLE AND IMPLICATIONS OF THE EVENT BASED COMMUNICATION IN THE ELECTORAL CAMPAIGN

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The electoral campaigns are considered to be among the most delicate challenges for a marketer due to the limited time available, the sensible margin for error, the high impact of each statement and the condensation of a quite large amount of resources in a 30 day period. While the ultimate goal for the campaign staff is to bring the global electoral package closer to the electorate and earn their votes most, of the time various competitors use disappointingly similar tactics that create confusion among the electorate. The campaign related events turned out to be one of the tactics that allows for a pin-point targeting of the electorate and a better control on the receivers of the message. This paper focuses on the types of events used that can be used in an electoral campaign reinforced with their particularities and effects registered in previous campaigns.

Keywords: electoral marketing, communication, events, targeting, global electoral package

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The history of the Romanian electorate and its behavior

Over the past 21 years the Romanian electorate experienced the “to do list” types of electoral campaigns, due to the fact that the dominant political factions relied mostly on identifying and exploiting the weaknesses of their competitors and less on conceiving a proper global electoral package.

This odd behavior has his origins in the budgetary restrictions and the lack of marketing implementation especially in the first 10 to 15 years, conditions reflected by the business environment also in that period.

The campaign strategy was based on promises extracted from the problems specific to every local community at a specific moment without little if any perspective on the entire country or concern about the availability of the resources needed to fulfill the promises being made.

This strategy turned out, as expected, to be disastrous for all the major factions with a chance to win the elections as their less ethical battle for supremacy generated a bad image for the entire political environment and the confidence of the electorate in a certain faction, candidate or doctrine plunged to an all-time low.

The disappointed and troubled electorate “rewarded” the superficial approach of the political environment with their lack of confidence in all future promises materialized in a strong indifference towards the campaign efforts and the “confidence” vote reaching an alarming low in the last 5 to 10 years.

One of the main problems in reaching the electorate and designing a winner national strategy is the unequal development of different areas of the country, a major factor that influences the needs and desires of the local inhabitants.

While a campaign template can be considered proper for various types of localities (cities over 50.000 inhabitants, cities with 10.000 to 50.000 inhabitants, big and small villages...) a very

strong influence comes from the local specific. Some former industrial cities are reduced to a big pile of rusted closed factories and their inhabitants are barely holding on while other agricultural communities have their own desires and so on. Even in the last campaigns no faction proved to have a solid campaign strategy based on clearly identified segments of electors.

The society is becoming indifferent towards the generic “crowd baths” and continue to mind their own business remaining neutral to the electoral efforts or even reacting negative to the constant communicational harassment specific to the 30 day electoral campaign.

Another major problem of the Romanian society is the generation distribution. Older generations conceived in the industrial development boom in the '70s and '80s are up to three times bigger than the ones conceived after 1990 and this is just a part of the problem. The percentage of people over 50 years of age in the total population is alarming and accordingly to the evolution of the birth statistics is only going to be worse as the average number of children for family dropped from 3.4 to 0.8 and the economic crisis is not going to help the improvement of this indicator.

The fall of the huge industrial system rendered most of the people over 50 years of age professionally useless as their position disappeared and they were forced to take on another profession or go to inadequate jobs turning to disappointed reminiscences of an over ambitious, unsustainable industrial dream.

Unfortunately the majority of Romanians with the right to vote is composed of people past the age of 50 mostly living in the rural areas that together with the former industrial workers have become to rely on social allowances and retirement fees.

It is because of this financial weakness of the majority of the electorate that the political factions are focusing their efforts on the sensible areas of the country where the return on the investment is greater than the one in the major cities.

The principle of equality that is a fundamental constitutional right makes no difference between the vote of an uninformed 80 years old from the rural area and a proper informed 30 years old from a major city and this should not be a problem in a country with equal distributions on each generation. In the past years rumors have appeared regarding the uselessness of going to the polls in the major cities due to the fact that the results of the polls will not reflect the voter's opinion. Why the results can be different from the options of some electors this difference is due to the fact that the capitol city has less than 10% of the country's population and less than 50% of its inhabitants with the right to vote choose to go to the polls on Election Day. By comparison in the rural areas, especially in the small localities people see the polls as some kind of celebration and go to the sections in large numbers reaching even 80% or more.

The Romanian political factions and their campaign strategy

As the electorate adapted to the classic view over how things should be done in a campaign by avoiding and disregarding the efforts done in the 30 day campaign the political factions saw that something must be done in order to increase the efficiency of the faction-electoral communication and this is where the science of marketing comes into the game.

Various faction from western Europe and the United States have been using the marketing instruments in their campaigns for a few decades now with such good results that a new branch of the marketing science appeared: the electoral marketing.

When dealing with a tough and divers audience such as the Romanian electorate the implementation of the electoral marketing was the proverbial “breath of fresh air” needed to revitalize the electoral campaigns and get the factions closer to the society for which they fight to represent.

For the moment a big percent of the factions present on the Romanian stage have chosen to implement only a couple of elements from the electoral marketing tool bag selecting mostly tactical elements that are being applied without unity and little to no strategic planning.

As the number and variety of tools being used evolved there is still a major problem due to the campaign fever: the lack of interest for the final beneficiaries, for the status and opinion Romanian society. It is obvious the importing a successful tactic from an over the seas campaign cannot and will not have the desired effects when implemented on a significant market by another faction without testing its potential first.

This campaign rush combined with the hibernation of the electoral machine between the legal campaigns puts the marketing research on one of the last position of the faction's to do list. Without relevant and fresh data from the market the short term strategy is mostly based on promising more than the competitors do and trying to get some of them down from their tall horse before they try to do the same. Various electoral research results still fill the news bulletins with contrasting results and a "staggering" one hundred respondents believed to be representative at a national level.

While some of the major factions have their own confidential market research done, with results that stay with the top end staff members even in their case there is little or no uniformity on all the regional and local agencies. More concerning is the fact that, as some party representatives divulged in the media, some strategies failed because in some local agencies the faction members completed the questionnaires "in house" in order to send good reports towards the central campaign office and make a good impression managing to render the national strategy or at least the regional campaign strategy useless.

The fanatic supporters of any faction combined with some local leaders hung up on getting good reports are sabotaging their own party from the inside doing more harm than any other competitor can. This is the main reason why some faction leaders and campaign staff members with experience consider a proper marketing approach useless and choose to limit their marketing efforts on the tactical level and base their decisions mostly on their experience and intuition.

The inefficient communication between the headquarters of the faction and its local branches combined with the overwhelming workload specific to the electoral campaign (compared to the passive activity in the rest of the time) motivates the faction leaders to go for a sales oriented vision for their campaign instead of a modern more efficient one oriented towards satisfying the need of the electorate better than the competitors do.

In these conditions the political faction choose the replace the electoral marketing approach with a more simple approach that focuses its attention towards the communication component of the marketing mix.

The advertising industry is getting ready for a feast each time an electoral campaign is getting close but over the past years the electorate had become immune to both indoor and outdoor advertising, BTL and ATL, avoiding all of them with the same tenacity.

As it turns out, especially in the big cities where the advertising machine is at its best, the people are willingly avoiding everything that smells like electoral advertising as long as there's nothing in it for them. Some minor promotional gifts like small personalized objects (lighters, balloons, caps and so on) usually get away unnoticed there's a limit on the value of the object that can be given as a present in the electoral campaign and there were numerous conflicts over the time as the political factions accused one another of trying to buy the votes of the people by giving products that ranged from buckets to cell phones.

In order to play it safe some factions decided to go for events ranging from a small on the block party for kids to large concerts as a technique perfect for gathering respectable numbers of potential voters willing to endure a couple of messages from a certain candidate in order to enjoy the show.

This tolerance from the behalf of the electorate as well as the low costs per participant and the superior success rate made the events one of the most powerful and efficient electoral

communication instrument and is being widely used by all factions no matter their size, financial strength or hope to achieve victory.

The event based marketing communication

Regardless of the size, age, doctrine and odds of success all political factions make good use of the people's desire to have a good time for free and to gather in masses celebrating a more or less famous date.

Due to the communicational versatility of an event various types have been used over the last campaigns depending on the available budget, their purpose and the category of electorate targeted. Few other markets have such a great diversity of profiles for their beneficiaries as the electoral market and this is only making the segmentation and positioning process tougher.

Every segment of electorate has its own needs, preferences and taste so, as far as event planning goes, the marketer will either go for a general mega artistic event in regional centers or for a series of smaller micro events focused on the segments sensible to a more consumer oriented approach.

An experienced marketer will always choose a personalized approach over the standard "one size fits all" view but this is close to impossible when there are close to 18 million potential customers (citizens with the right to vote) out there spread across 238 thousand square kilometers.

This is where the extensive network of branches comes in allowing the political faction to go from macro campaign management, done from the headquarters for the entire country, to the medium level conducted from the 41 county branches, and finally to the micro campaign management usually done at the smallest local faction branch.

The power, influence, financial power and effectiveness of the branches vary drastically from one to another and while, in normal circumstances, the lower representatives have the advantage of knowing the terrain and local communities in details the actual know-how and marketing vision is mostly restricted to the headquarters and some local agencies based in the major cities.

In most cases the advantages of the three hierarchic levels are not combined practically due to some differences in style of management and/or vision between the strategic department from the headquarters and the manager of the local agency.

At the macro level the most commonly used events target the general public and, as a PR campaign wish to promote the image of the faction and/or its candidates, to improve awareness and public acceptance through different types of gatherings as:

- Public outdoor concerts (free access)
- Sport events, amateur competitions
- Fund raisers
- Exhibitions and other art manifestations
- National/regional gatherings of party members and followers
- Festivities celebrating various holy days (if any)
- Sponsorship announcement parties
- The official candidate proposal ceremony

As our interviews reflect respondents from all social classes see most of these events as "try hard" campaign efforts gone over the edge, that only the faction's followers will like and believe in while others are a success to the general public due to the free entertainment. If for our respondents the first category of events is on the black "to avoid at all costs" list the last one is mention as being acceptable and they're willing to tolerate the public speech during several breaks if the weather is fine and the show is worth waiting for.

Even so the message being transmitted will most likely be received with a certain degree of distortion and most of the cases stored in the short term memory due to the multiple influences

generated by the crowd interaction. Less than 10% of our respondents changed their opinion about a certain faction or candidate after participating at such an event.

These gatherings attract, as some of the participants remember, mainly teenagers and young people in their twenties. This is to be expected as entertainment usually focuses on young people but, as national particularity, a noticeable number of retirees and older adults participate as they are used to receiving gifts every time there is some noise in the electoral campaign.

No measurable or noticeable positive change in the behavior of our respondents was recorded but, as it turns out, they slightly remember some interesting embarrassing situation that the candidates were drawn into by the response of a hard to control crowd when its patience was forced out.

The acceptable amount of “propaganda” in the total length of the event was around the average of 15 to 20 minutes in a 2 hour concert divided into 4 interventions. If before the concert the crowd is energetic and eager to witness the performance and will resist to maximum 1- minutes of showing off at the end of the concert our respondents did not specified a maximum length of the speech because their only concern at that time will be how to escape from the crowd and get back home.

Understanding the behavior of the masses in large gathering is more than a useful skill, it is an essential guideline that can make the difference between a splendid waste of limited campaign time and money and an efficient event whose effects can make the difference on that most important Election Day.

The marketing vision is highly oriented towards the customer by definition but in this particular atypical market the marketer should take into consideration the problematic of identifying the customer and the rapid shift in political options during the critical last 48 hours of the electoral campaign.

The only affordable approach here will be to target the followers of the faction/candidate but also at least ensure a tranquil climate with the fast shifters, non-voters and most importantly the followers of the competition. This is of major importance due to the fact that if the election gets to the second stage where the number of finalist factions goes down to three or less an acceptance relation with the voters of the completion might go a long way and make that fine difference.

Large group gatherings specific to the “mega-events” category specially done in neutral public places are perfect because the crowd is grouped on communal non-political interests and can be addressed as a group and the messages are being delivered using non-targeted approaches.

The specific characteristic that differentiates the event base communication from every other communicational channel consists in a more subtle link to the faction and/or candidate and the fact that the individuals in the gathering will resist electoral messages as a small fee due in exchange for the entertainment received.

Mega-events: from mass communication to quiet segmentation

The art of marketing is based on satisfying the customer in better condition compared to other competitors but there’s no such thing as “good quality”. The ever consuming paradigm between standardization and personalization is specific to the event based communication and thing are only changing for the worst when the event turns into a mega-event.

Every large crowd has an issue: the large number of subgroups, everyone with it distinctive preferences and behaviors. It is this difference that sometimes causes conflicts when various subgroups interact. From small localized distortions than are quickly being suppressed to more disturbing conflicts that go all the way to physical injuries any kind of disturbance affects the image of the eminent and the overall utility of the event.

Tighter security is never the answer. If extensive law enforcement is necessary than the communication strategy is wrong and the political faction is risking an image crisis if the electorate makes a link between it and large gatherings of aggressive crowds.

The main idea is to use segmentation in order to determine at first the groups of potential electorate being targeted and characterize them all in order to identify every little thing they have in common regardless of their political color, history or temporary preference.

The main idea is to integrate non-voters and people with superficial preferences into a large group centered on a common interest and make them enjoy a pleasant experience. The purpose of the exercise is to make these relative non-voters see that the faction and the candidate are supported by people just like them, with interests similar to theirs increasing the individual's acceptance towards the eminent of the message.

For a big faction with real chances in winning the elections or at least make it to the second poll these passive followers are quite important. The past experiences are full with last minute negative news that drastically change the opinion of less devoted followers and leaves them disappointed. In this case their second option comes into action as they wish to teach their initial favorite faction a lesson.

Bigger events usually use general audience subjects and attract bigger crowds constructed from a larger number of segments, some desirable, some less desirable. The wellbeing of all participants along with a lesser negative press impact is more than a preference of the organizer but it is its obligation.

In past electoral campaigns the press widely promotes events with potential gone bad due to the unethical conduct of some undesirable groups of participants. Some call them "militia" sub-groups sent by the competition to destroy the events, others refer to them as groups of local hooligans that might of been "motivated" by the adversaries but regardless of their origin or intent the results of their actions speak for themselves.

In order to prevent such behaviors the theme of the event must avoid subjects specific to uneducated, violent people and the strategy chosen for the message distribution should be well thought at. The main issue here is to present facts, to propose an alternative, to show consideration and appreciation, care and personal involvement things that cannot cause a dispute between people attending the event and, at the same time, true facts, new facts that should capture the attention of the people with a strong long term memory effect.

It is all right to generate debate themes and involve the people in the cause but anything close to generate a competition between the participants should be avoided at all costs. The idea is to make them think and act as a group, as a part of the society with common concerns and desires and not to divide them into arguing subgroups.

Personalization is nice but it doesn't mean to use "divide et impera" one very group. Therefore is more efficient to make the individual from a certain gathering to feel as a part of a large group and think of himself as being different at the same time. People participating at various events are usually from a certain area and can easily be addressed as a group different from any other one in the territory

Every individual have two major social needs: to be part of a larger group and to feel special, apart from every other individual. Using an event to send electoral messages is quite inspired because the needs and desires of the group are more general, easier to satisfy and hard to deny by certain individual due to the group interaction. Being aware of the power of the group and unwillingly to contest the needs of the majority the individual will incorporate the mass euphoria and remain with a good impression about the plans presented to him.

Large scale events offer the marketer involved in an electoral campaign the advantage of using the appurtenance groups to address individual without being forced to invest the limited resources available into personalization and segment identification.

A MARKETING VIEW OVER THE ROLE OF THE PUBLIC AUTHORITIES IN THE PROTECTION OF THE CONSUMERS' PRIVATE SPACE

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The concept of privacy, seen in connection with the consumer's private space, and defined in terms of the rights the consumer have to disclose or not, respectively to have protected their personal data has gained an increasing importance, as a result of the organizations' extended and more and more aggressive attempts, within their marketing efforts, to capture, process and use the consumers' personal data. Privacy protection has become an important but, in the same time, extremely sensitive and challenging topic to be taken into consideration by all the stakeholders involved in the processing and employment of the consumers' personal data. A key role in this respect is played by the public authorities acting as data controllers – the Data Protection Authorities, that have to adopt a more proactive and efficient attitude in adopting and implementing policies and processes aiming to ensure a more effective protection of the personal data and private space, conduct privacy impact assessments and continuously improve the specific activities.

Paper presents the opinions of the consumers through the results of an exploratory study regarding the importance given to the protection of the personal data, the area of protection of the specific laws, the need for laws regulating the personal data protection, the balance between the public and private entities in providing a proper protection of the personal data, and the relationship between the domestic, European, and international levels in ensuring the protection of the consumers' personal data. Results regarding the role of the public authorities in the protection of the consumers' personal data and private space– in terms of the most appropriate institution to act as a data controller, the rights consumers consider important in relationship with the protection of their personal data and the risks faced in the context of a less effective protection – are also presented.

Keywords: consumer, public authorities, personal data, consumer private space, Romania

JEL Classification: M31

Introduction

The end of the 19th century has brought the first formal attempts to conceptualize privacy. In 1887, the Pacific Railway Commission has found that “of all the rights of the citizen, few are of greater importance or more essential to his peace and happiness than the right of personal security, and that involves, not merely protection of his person from assault, but exemption of his private affairs, books, and papers, from the inspection and scrutiny of others” (Langenderfer and Cook 2007: 734). Three years later, in the article “The Right to Privacy”, Louis Brandies has approached and explained the individual’s “right to be left alone” as a response to the loss of privacy experienced during that times (Guarda and Zanone 2009: 337).

In spite of their rich history, the attempts to define *privacy* were rather difficult due to the wide number of related interests such as the personal information control, reproductive autonomy, access to places and bodies, secrecy, and personal development (Kemp and Moore 2007: 58). Many definitions given have tried to explain the content of privacy considering the right to be let alone, limited access to the self, secrecy, control of personal information, personhood and intimacy (Solove 2002: 1087). More, there are points of view stating that privacy cannot be defined as a right (but as a valuable thing deserving a fundamental respect), this being in conflict with itself: if privacy were indeed a right, one could demand protection for it but seeking for the protection of privacy may lead to some violation of privacy (van Swaay 1995: S152).

From a *marketing perspective*, definition of privacy should focus on the personal data and information regarding the consumers. In this respect, privacy has been defined as the claim of individuals, groups or institutions to determine for themselves when, how, and to what extent information about them is communicated to others (Westin 1968: 7). Schoeman adapted the content of privacy at individual level presenting it as a claim, entitlement or right of an individual to determine what information about himself (or herself) may be communicated to others; the measure of control an individual has over information about himself, intimacies of personal identity, or who has sensory access to him; and a state or condition of limited access to a person, information about him, intimacies of personal identity (Jóri 2007:111).

Privacy must be seen in connection with the particular area where its content is applied. The above definitions imply the existence of a *consumer's private space* defined through and including an amount of information referring to the demographic, psychographic and behavioral characteristics of the individuals (*personal data*), and the rights the consumer should have to disclose or not, respectively to have this information protected through the appropriate laws and means (Vegheş, Pantea and Bălan 2010: 263).

Since its emergence in the mid-1960s, privacy protection has been constrained by the fair information practices model to a framework that has been more protective of corporate and government interests than of people's data, let alone of people themselves (Clarke 2009: 129). A key role in this respect is played by the data controllers – the Data Protection Authorities operating in each country. According to the Art 29 Working Party (an influential body comprised of representatives from the European Union Member States' Data Protection Authorities), data controllers should be proactive in at least the following: adopting internal policies and process to implement the requirements of the data protection, put in place mechanisms executing the internal policies and processes, draft compliance reports and carry out audits, carry out privacy impact assessments, and assign responsibility for data protection to designated persons (Wong 2011: 56).

It is obvious that issues of privacy and consent impact the very nature of society and governance, so the society will have to set in place dynamic policies that enable switching, change or adaptation (Elahi 2009: 118). In spite of all these, all the current and proposed measures seem to fall far short of providing a comprehensive system of enabling and protecting a societal expectation of privacy and, in the end, even with a fairly comprehensive system of protections, enforcing those laws and the enforcers themselves, remains problematic (Hough 2009: 412).

Methodological Notes

Data expressing the opinions of the consumers regarding importance given to the protection of their personal data, the area of protection, the need for laws regulating the personal data protection, the balance between the public and private entities in providing a proper protection of the personal data, the relationship between the domestic, European, and international levels in ensuring the protection of the consumers' personal data, the most appropriate institution to act as data controller, the rights associated with the personal data protection, and the risks derived from an inappropriate administration of the personal data have been obtained conducting a research

approach with a larger overall scope, of assessing the exposure, attitude, current and future behavior of the consumers in connection with the direct marketing efforts of the organizations. Data have been collected in January 2010 using a sample including 78 Romanian consumers from the Capital and other cities, aged 18 to 30, with higher education, which have been questioned about all these aspects, as well as about other relevant elements for the way direct marketing is implemented in the Romanian market.

Main Findings

Research has provided a first of set of information about major aspects concerning the personal data protection legal environment in terms of the: importance given by the consumers to the protection of their personal data, the area of protection – as it is defined by the respondents considering their rights as consumers respectively as citizens, the need for a law regulating the personal data protection, the balance between the public and private entities in providing a proper protection of the personal data, and the relationship between the domestic, European, and international levels in ensuring the protection of the consumers' personal data.

Majority of the respondents (70.5 %) consider “very important” the **existence of the appropriate laws and regulations** protecting their personal data and almost all of them (97.4 %) appreciate the protection of their personal data through the specific legal framework “important” and “very important”. As less than 3 % of the respondents have assessed the importance of the personal data protection in a different way (of an average importance, to be more specific), it can be concluded that subject of the protection of the consumers' personal data and privacy is a sensitive one and requires a careful handling and approach from the part of all the interested stakeholders – companies and organizations conducting direct marketing campaigns, public authorities involved in providing the proper legal framework and enforcement of the specific laws and regulations, respectively consumers exerting and defending, when necessary, their rights in terms of personal data processing and protection of their privacy.

Respondents have been asked to define the **area of protection** that specific law and regulations should cover: their personal data and privacy rights as citizens, as consumers or both. Majority of the respondents (79.5 %) have indicated the rights they have both as consumers and citizens as object of the related laws and regulations. Protection of the rights the respondents have as citizens (19.2 %), respectively as consumers (only 1.3 %!) has been indicated, in both cases, by a minority of respondent. This result may suggest several conclusions: first, the respondents seem to be more aware and, consequently, more concerned in terms of the personal data and privacy rights they have both as citizens and consumers; secondly, respondents may have been exposed to direct marketing campaigns – conducted not only by companies selling different goods and services, both also by the non-profit entities and political parties “selling” social initiatives or political candidates; thirdly, the increased aggressiveness of the direct marketing campaigns have led to a more defensive behavior regarding the disclosure of the personal data and protection of the private space not only in a commercial but, as well, in a social context.

In this context, **laws and regulations for the protection of the personal data are necessary** for 87.2 % of the respondents, while the remaining 12.8 % considering them “rather necessary”. The need for legal framework that guarantees for an effective protection of the personal data may be one of the major motivators of this attitude. Further, this greater than before need for protection is the result of the combination between the higher exposure of the consumers to the direct marketing campaigns conducted by the companies, organizations and public authorities, and the increased aggressiveness of these campaigns.

The **balance between the public and private entities** in providing a proper protection of the personal data places in a more important position the public authorities, indicated as the best entities capable to exclusively provide an effective protection of the personal data by the majority of the respondents (44.9 %). By contrast, private institutions have been indicated in an exclusive

manner by only 15.4 % of the respondents. The relatively high percentage (39.7 %) obtained by the mixed option – protection of the personal data ensured by a partnership of public and private entities – may suggest, on a hand, a relative mistrust in the capabilities of the public authorities to provide an effective protection of the consumers’ personal data and private space and, on another hand, leads toward an integration of a private component in the overall activities conducted by the public data controllers. Involvement of this private component may represent the response given to the consumers’ expectation for a better private control over the functioning of the public authorities in the field and, in the same time, a guarantee given to consumers that their personal data and private space protection will be more effective.

Romania’s adhesion to the European Union, as well as the increased effects of globalization, are the main drivers of taking in consideration the relationship between the **domestic, European, and international levels** in the protection of the consumers’ personal data. Majority of the respondents (85.9 %) have indicated that laws protecting the personal data should be European (34.6 %) and/or international (51.3 %) one. Preference for international and/or European laws and regulations may be seen both as a supplementary guarantee needed by the respondents for an effective protection of their personal data protection and private space, and, unfortunately as sign of a potential mistrust in the domestic legal framework and institutions enforcing it. The low level of trust in the domestic data controllers can be taken in consideration when explaining this result because the domestic law of personal data protection is nothing more than a very close, not to say identical, version to the European Directive 95/46/EC: so, maybe the law is appropriate, yet the ways data controllers enforce it, allow and support the protection of the consumers’ personal data may represent the real problem.

Respondents have also indicated the **most appropriate institutions** acting as data controllers choosing between a set of diversified options including public and private, specialized, less specialized and even not specialized, professional and other entities. Majority of the respondents (83.3 %) have indicated the National Supervisory Authority for Personal Data Processing (NSAPDP) as the most appropriate public institution to act as data controller administrating the processing of the consumers’ personal data and private space protection. This result expresses not necessarily the appropriateness of acting as data controller but the high degree of awareness of the NSAPDP. The Association for Consumer Protection (mentioned by 55.1 % of the respondents) and the National Authority for Consumer Protection (50.0 %) have been indicated by at least a half of the respondents. The expression “consumer protection”, present in the appellation of the entities mentioned above, suggest clearly the relationship between the personal data and the protection of the consumers and, also, the rather defensive attitude of the respondents regarding their personal data and private space. The triad National Supervisory Authority for Personal Data Processing – Association for Consumer Protection – National Authority for Consumer Protection synthesizes almost perfectly the solution regarding the consumers’ personal data and private space: a partnership between the public authorities and private entities for ensuring an effective consumers’ protection.

Table 1. Institutions indicated by respondents as appropriate to act as data controllers

Institutions	Percentages
National Supervisory Authority for Personal Data Processing	83.3
Association for Consumer Protection	55.1
National Authority for Consumer Protection	50.0
General Direction of Persons’ Information Administration	23.1
Ministry of Internal Affairs	16.7
Romanian Direct Marketing Association	14.1
Government of Romania	3.8
Ombudsman	2.6

The General Direction of Persons' Information Administration, the Ministry of Internal Affairs, and the Romanian Direct Marketing Association have been mentioned by smaller parts of the respondents. Indication of the domestic professional in the field most connected with the personal data employment may suggest both a possible expectation of the consumers to see the association more involved in the protection of their personal data and a potential direction of development of the association's activities.

The Government of Romania and the Ombudsman held rather peripheral positions in this context although, until the establishment of the NSAPDP, Ombudsman has been the legal domestic entity covering the area of personal data protection. As a final observation, the lack of mentions for the Open Society Foundation and the Group for the Social Dialogue indicates an increased knowledge of the respondents of the institutional side of the personal data protection and, by consequence, a higher concern for the related problems.

Respondents were asked to indicate **the most important rights** the laws regarding the protection of their personal data grant them. The right to be informed about the scopes of the data processing (mentioned by 88.5 % of the respondents) and the right of making objections against the data processing (82.1 %) are the important rights and present a high interest for the respondents. They are followed by the rights to access their personal data (73.1 %), to refer to a court of law in matters regarding the processing of the personal data (67.9 %), and to intervene upon the data already collected and processed by the databases owners (62.8 %). The least important right indicated by respondents seems to be that of not being the subject to an individual decision in terms of the personal data processing and usage (29.5 %).

Based on these results, consumers seem to allocate a higher importance to their rights as providers of personal data – supplying this data being more important for them than their later processing, with a particular focus on prevention and defending against the inappropriate attempts of collecting and processing their personal data.

Improper administration of the personal data may affect the consumers' confidence in the data processors and data controllers. In terms of the risks associated with a poor personal data processing, respondents have indicated, as major threats, the potential abuses from the part of the private entities (96.2 %) and frauds that might be suffered as consumers (75.6 %). Potential abuses suffered from the part of the public authorities (53.8 %) and the increased exposure of their private life (50.0 %) have also been identified as significant risks, while the limitation of their private space (30.8 %) has been indicated as a rather tolerable risk.

These results are explained by the relatively increased exposure of the respondents to the more aggressive direct marketing campaigns of the companies and organizations – in relationship with the consumer frauds and other potential abuses from the private entities, by the relatively higher trust the respondents have in the public authorities by comparison to the private entities, and, last but not least, by the rather unclear identification of the content of their private space.

Limits of the research

The research approach has been conducted under the context created by the existence of the limits related to the set of the variables considered to define and measure the consumers' opinions regarding importance given to the protection of their personal data, the area of protection, the need for a law regulating the personal data protection, the balance between the public and private entities in providing a proper protection of the personal data, and the relationship between the domestic, European, and international levels in ensuring the protection of the consumers' personal data, and, respectively, the sample and the sampling procedure used (further research should be conducted using a sample covering categories of respondents differently defined in terms of their demographics such as age, education and income).

Conclusions and main implications

Consumers tend to consider “very important” or at least “very important” the existence of the appropriate laws and regulations protecting their personal data and the subject of the protection of the consumers’ personal data and privacy is sensitive and requires a careful handling and approach from the part of all the interested stakeholders. The area of protection of the specific laws and regulations should cover their personal data and privacy rights both as citizens and consumers or both. Consumers seem to be more aware and, consequently, more concerned with the personal data and privacy rights in the context of the more aggressive direct marketing campaigns conducted targeting them. Laws and regulations for the protection of the personal data are simply necessary for an effective protection of the personal.

The balance between the public and private entities places in a more important position the public authorities but the mixed option – protection of the personal data ensured by a partnership of public and private entities – is appreciated by a significant part of the consumers. Laws protecting the personal data should be rather European and/or international just to offer a supplementary guarantee for an effective protection of their personal data protection and private space.

The National Supervisory Authority for Personal Data Processing (NSAPDP) has been indicated as the most appropriate public institution to act as data controller administrating the processing of the consumers’ personal data and private space protection. The triad National Supervisory Authority for Personal Data Processing – Association for Consumer Protection – National Authority for Consumer Protection synthesizes almost perfectly the solution regarding the consumers’ personal data and private space: a partnership between the public authorities and private entities for ensuring an effective consumers’ protection.

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CAN MARKETING SUPPORT THE IMPLEMENTATION OF EFFECTIVE EGOVERNMENT? ANALYSIS OF THE SINGLE POINT OF ACCESS PORTAL FOR ROMANIAN ELECTRONIC PUBLIC SERVICES

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The advances in technology hold great potential for helping Romanian government respond to its challenges namely, better service delivery, better procurement, efficient working and better communication with citizens and businesses. While the European Commission develops the main strategies on eGovernment, every member state has the freedom to identify its own necessities and decide according to specific social, administrative and economic context. Designing, cost setting, choosing the best supply channels or communicating with involved actors, are all marketing instruments which, if used accordingly, can ensure modern and efficient public services. This paper presents an analysis of the degree of development of public services available at the “www.e-guvernare.ro” portal, the single point of access for specific Romanian electronic public services.

*Key words: electronic government, public services, marketing instrument, development, internet
Cod JEL: M30, M31, M38*

1. Introduction

Since the advent of the Internet about 40 years ago (Ho, 2002), the number of services that rely on information and communication technologies (ICT) has increased significantly, making today's society an IT savvy one. While in the 90's, the Internet, has led to the outbreak of the eCommerce revolution, a type of commerce embraced by private and multinational organizations, with the beginning of the new millennium we witnessed the affiliation of the public institutions to the same eBusiness principles by introducing national eGovernment initiatives (Weerakkody, et al. 2008). Defining eGovernment extends from "using ICT to free the flow of information and to overcome the physical limitations of traditional paper-based systems" (OECD eGovernment Working Group) to "using technology towards enhancing the access and delivery of government services so as to benefit citizens, business partners and employees" (i2010 eGovernment Action Plan). The universal thesis underlying these definitions is that eGovernment imposes the automation and digitization of current paper-based procedures, in which case it is necessary the development of new leadership styles, new ways in debating and choosing strategies, new concepts regarding the development of the business environment, new ways of behavior research and facing the needs of citizens and communities, new ways of organizing, collecting and providing information (www.unesco.org).

In order to highlight the specific marketing strategies and tactics and how they can influence the development of eGovernment, a brief overview of this area's development is necessary. In retrospect, we notice that the cyclic evolution of the economy underpins the development of marketing. Initially, the role of marketing was to generate demand for the organization's products. The 4 P's, developed by McCarthy, explained concisely the generic practices: product development, pricing, promotion and organization of supply (placement) (Kotler and Keller, 2008). Given that businesses generated revenues without considerable efforts, nothing additional could have been asked for from marketing. Everything suddenly changed when the economy was weakened due to the 1970's oil crisis. Generating the demand for goods had become increasingly difficult and it required and led to exceeding the 4 P's frame. No matter whether the reasons regarded the changes in the consumer's behavior or some errors in the product design, saturated distribution channels or the lack of effort to promote, the environment forced specialists to

remodel their optics, to reflect and to create better concepts. The original 4 P's were joined by other Ps: people, processes, product elements, public opinion, political power. However, the profound change has occurred by replacing the product with the customer as the center of marketing efforts. Therefore, new disciplines have been introduced, disciplines like Customer Management, which includes strategies such as segmentation, targeting and positioning. Marketing has converted itself from a purely tactical approach into a strategic process (Kotler, Kartajaya and Setiawan, 2010).

It isn't difficult to make a parallel between the tough times that have led to the development of marketing as a domain and the perpetual need, emphasized by the current economic crisis, to improve the services of the public sector. The knowledge area covered by the eGovernment instruments in some E.U. member states has increased considerably in recent years. This upward trend has accelerated in spite of, or perhaps, partly because of the financial crisis and the urgent need for governments to be competent, transparent, accessible and efficient. The demand for social assistance has increased, while revenues have fallen dramatically. Public sector commitments for stimulus packages and support of the financial sector have also raised the level of public debt (United Nation E-Government Survey, 2010).

2. Strategy and Objectives

The management taking place in government institutions aims to satisfy the public interest, without having in sight a material profit (Popescu, L. and Popescu, I., 2007). Hence the objectives of a public institution are materialized in satisfying the public interests by addressing the social needs. A social need, in order to represent the public interest, must be covered by the law. The objectives show what the organization wants to achieve, while the strategy is an action plan needed to achieve its objectives. Without insisting strictly on the various public services, it is important to identify the main strategies for eGovernment defined by the E.U. in the "eGovernment Action Plan":

Table 1: EU's eGovernment Main Policy Strategies

Strategy	Description
1. Inclusive eGovernment	Administrations from national, regional and local levels, together with their agencies and other intermediaries (NGO's, civil societies, volunteer associations, and the third sector in general) that deliver public services, are increasingly integrating ICT's into their processes, both behind the scenes and in their interfaces with the public. Although eGovernment services should reduce the complexity of the interactivity between citizens, organizations and administrations, there is a dangerous possibility that people without easy access to ICT's could find it even harder to deal with the government.
2. Efficiency and effectiveness	EGovernment contributes significantly with regard to the user's satisfaction, transparency and accountability, a lighter administrative burden and efficiency gains. Improving efficiency and effectiveness in any kind of activity that requires the knowledge of the current situation and specific targets for improvement, often established through comparison with counterparts that are seen to be "doing better" in a particular area. In eGovernment, the E.U. is taking a leading role in developing measurement techniques and benchmarks through which organizations can judge their performances. The E.U. fosters the development of efficient and effective eGovernment services by beginning with a two-pronged strategy. It promotes cooperation and exchange of experience regarding the best practices and technical standards established after assessing the impact of these services.
3. High-impact key services for citizens and	The Action Plan aims to create more widely available high-impact services for citizens and businesses, such as electronic procurement services for businesses, services delivered through mobile telephony, or social security services.

Strategy	Description
businesses	EGovernment will be critical in enabling the service providers to take advantage of the market opportunities outside their home country.
4. Key enablers	The plan also seeks to deliver the foundation upon which eGovernment systems will work together, and will form the connections between ICT systems in different public organisations and countries. Interoperable systems, electronic identification management, document authentication and archiving technologies are all critical so that all public services cooperate and share data. Open Source Software can provide a cost-effective method to support such interoperability and cooperation.
5. E-participation	In order to reinforce governance in Europe, the Action Plan will help to strengthen citizen participation and democratic decision-making by using new technologies to develop interfaces between democratic institutions, public bodies and citizens.

Source: E-government factsheet European Union (November 2008 Edition 1.0) <http://epractice.eu>

The marketing component is evident and ubiquitous in the vision proposed by the European Commission to the Member States. However, while the E.U. has defined strategies and goals valid for all Member States, each country has the ability and freedom to adjust them in accordance with the social, administrative and economic context specific features. Therefore differences have proliferated in terms of the scale of services offered by the implementation of eGovernment, the quality of new tools based on information technology or the efficiency (European Commission, 2008).

To construct a better picture of the development of eGovernment, EU grouped the various public services into clusters. A full list of the 20 priority public services is presented below:

Table 2: Essential Public Services

Citizens	Businesses
1. Income Taxes	13. Social Contribution for Employees
2. Job Search	14. Corporate Tax
3. Social Security Benefits	15. VAT
4. Personal Documents	16. Registration of a New Company
5. Car registration	17. Submission of Data to the Statistical Office
6. Application for Building Permission	18. Custom Declaration
7. Declaration to the police	19. Environment-related Permits
8. Public Libraries	20. Public Procurement
9. Birth and Marriage Certificates	
10. Enrolment in Higher Education	
11. Announcement of Moving	
12. Health-related Services	

Source: European Commission (2008), *The User Challenge Benchmarking The Supply Of Online Public Services*, 7th Measurement, Directorate General for Information Society and Media, <http://ec.europa.eu> (section information society).

3. Implementation aspects

Any service possibly offered through eGovernment requires a prior research to determine the actual need for its use, a sensible design, setting the level of implementation costs, establishing the best delivery channels and the right communication approach in order to make it easily accepted by the general public.

In countries that are especially concerned towards this kind of service, such as Australia, the Internet has already replaced the personal and phone contact and it represents the main way through which citizens interact with government (KPMG International, 2010). Understanding exactly the users' expectations and what is wanted from the informational system is essential for the success of any eGovernment project. If these requirements are not clearly stated, quantifiable

or do not meet the needs, results are similar for both originators, producers and target audience: frustration, waste of time, financial losses, loss of consumer confidence (Ho, 2002). Administration requires prompt, accurate and usable information about the targeted population segments, to take the best short-term tactical decisions and the best long-term strategic decisions. Discovering a relevant characteristic for and/or about consumers and understanding its implications will almost always result in a successful product launch with an accelerated rate of acceptance and use. The website “Grants.gov”, developed by the U.S. Administration, is a portal that provides the possibility to apply for one of over 1000 types of grants, scholarships or aid, within programs that have a total budget of \$ 450 billion, created by 32 government agencies. In an average month, the site processes about 200.000 electronic requests (Executive Office of the President of the U.S., 2009).

Unlike services offered by various organizations designed to meet specific needs of the targeted consumer groups, one would be tempted to say that public services address everyone, therefore the discussions concerning segmentation are redundant. The reality is almost always more complex, so, although for example, the need for social protection is valid for the whole society, the distinction between categories of beneficiaries must be made. It is obvious that the needs and preferences of students are almost always different from those of pensioners or farmers. Unlike the marketing of the private sector, public institutions can not eliminate segments on grounds of costs, so it should cover all categories of beneficiaries, establish, communicate and always serve, always focusing their attention towards increasing the benefit of the society and the state.

It is important to tackle eGovernment applications, but priorities must be set upon maximizing the acceptance criterion and their impact on society. By emphasising on the use of information technology in providing services to government agencies, eGovernment offers the opportunity to rethink the way these institutions deliver services. More precisely, it offers the opportunity to: examine its current operations and procedures, identify processes and practices that can be streamlined or simplified and implements them, and adopt new technologies to enhance these improvements. The Mayor of Baltimore has implemented the “CitiStat” program, a system that uses IT to monitor in real-time the document workflow and it is also a necessary tool to supervise the local government performance. Using information systems to track various performance indicators such as absenteeism and overtime, Baltimore's administrative expenses dropped \$ 13 million in the first year after the implementation of CitiStat initiative (Perez and Rushing, 2007). Later, after the Mayor became governor of Maryland, he created a similar system called “StateStat” (Office of the Governor, Maryland, 2008).

Increased access to information and administrative procedures leads to a greater accountability and transparency, as online automated processes eliminate the interference of government officials and provides monitoring groups and senior government officials with a mechanism to monitor possible abuses and corruption. Belgium's national portal called “My Belgium” provides a single point of access to information and administrative services. More than 9 million Belgians have electronic ID cards (eID), allowing them to download available authenticated documents from their own accounts, supported by the MyBelgium portal. Another example is provided by the Municipal Government of Seoul, South Korea, which has developed a website that provides citizens with a range of relevant information regarding rules and procedures, permit license application and processing solicitations. The portal also allows real-time progress monitoring of an application for a permit or license. Therefore, according to post-implementation analysis, the citizens are better informed, the administrative process is transparent and the temptation for bribery has been largely eliminated (United Nation E-Government Survey, 2010).

EGovernment projects are most often long-term efforts that require large capital infusion into software, hardware, infrastructure and training. There are various models for funding such projects in which the private sector plays a critical role. Under partnership agreements, the

private sector builds, finances and operates public infrastructure such as roads and airports, the costs being recovered through usage fees. Various financing schemes exist – from support and assistance loans for development from the donor/multilateral aid agencies, to partnerships and outsourcing contracts signed with private providers under the special financing conditions that can minimize the initial cost (Pascual 2004). In Germany, all eGovernment projects are approved only after a rigorous analysis of economic and financial aspects, according to a methodology developed specifically for this purpose and only in compliance with the minimum values of various economic and financial indicators. The methodology uses both the updated internal rate of return on investment, and a “broad economic analysis” by granting scores for items included in a catalog of elements that are specific to the implementation of these systems (Computer Society of India, 2008).

In case of a limited access to the Internet, devices such as mobile phones or personal digital assistants can play a very important role if governments are capable to adapt and innovate starting from a way of thinking focused on the citizen’s needs. An example is the Philippine tax collection office, which introduced a system of electronic confirmation via SMS which forwards the taxpayers that their payments have been recorded (United Nation E-Government Survey, 2010). Using a tool such as the SMS, involves obvious advantages, such as audience measurement at a rate of 100%. Secondly, SMS marketing is a highly personal manner of communication. The SMS is used as a communication channel for transmitting information. Naturally, the trend could be encouraged to cover the administrative system too.

EParticipation remains in an incipient stage in many countries, a finding which is related to the discrepancies between the government and the people. Governments should include surveys and feedback forms on their websites, or forums and blogs that allow discussions or display information of interest (Wylde 2006). More creativity in terms of how they interact with the public is absolutely necessary, perhaps by creating integrated portals or actively seeking views and opinions that can be used to design public services or to shape public policy. In this case, the governments of Australia, Bahrain, Canada, Kazakhstan, Korea, Singapore, U.K. and U.S. are leading by far (United Nation E-Government Survey, 2010).

4. The Romanian eGovernment Portal

In accordance with the level of development of specific eGovernment services, especially those delivered via the Internet, the literature describes several models of providing online public services, such as: the Layne and Lee model (Layne and Lee 2001) based on the U.S. experience, the Hiller and Belanger model (Hiller and Bellanger 2001) developed for U.S. federal government, focused on aspects of safety and protection of personal data in supplying public services through electronics means, the ANAO model (Australian National Auditing Office) (www.anao.gov.au) used for classification and evaluation of electronic public service by Australia; the SAFAD model (Swedish Agency for Administrative Development) (Persson and Goldkuhl 2005) used in Sweden to assess the level of development and evolution of eGovernment initiatives. In this paper was used the SAFAD model, adapted by Cap Gemini in the study “The 9th eGovernment Benchmark Measurement”, which identifies five levels of development:

Table 3: Maturity Model

Level	Description
1. Information	Necessary information’s to begin the procedure for obtaining the public service are available online
2. One way interaction	The website offers the possibility to download the forms, in order to obtain the print form needed to initiate the procedure for accessing the public service
3. Two way interaction	The website offers electronic access to the official electronic forms to start the procedure for obtaining public service

Level	Description
4. Transaction	The website offers the possibility of full accessing the public service through the Internet, including the decision to use it and its effective provision
5. Targetisation	It has a proactive nature, the public service is provided automatically

Source: adapted from Cap Gemini – The 9th eGovernment Benchmark Measurement, June 2010

The National Center for Information Society Management, an institution subordinated to the Ministry of Communications and Information Society, has as main task the national implementation and operation of systems that provide services for eGovernance (www.mcsi.ro/Institutii-coordonate/CNMSI). In this respect it developed the “www.e-guvernare.ro” portal, which is intended to “reduce the bureaucratic and administrative barriers and to increase access to information and public services” (www.e-guvernare.ro/Default.aspx). It contains 22 sections developed to facilitate citizens’ contact with various public institutions and their specific activities. The public services offered by the portal were examined using the model described above. The following table highlights the development and characteristics of each section evaluated throughout march 2011:

Table 4: Online Public Services Development

Section name	Description	The level of development	Other relevant comments
Online Services	Short listing of online public services available on the portal	Information	–
Information statements	Information on submission tax returns and institutions for whom they are intended	Information	–
Submit Forms	Taxpayers have the opportunity to electronically complete, certify and send 9 type of statements to 4 public institutions: 1. Statement for payment obligations to social security budget – National House of Pensions and Other Social Insurance Rights; 2. Statement regarding the nominal record of policyholders and the payment obligation for unemployment insurance budget – National Agency for Employment Occupation; 3. Declaration on the contribution to the health insurance budget – National Agency for Health Insurance; 4. Statement for payment obligations to the state budget – Ministry of Public Finance (M.P.F.); 5. Income Tax Declaration – M.P.F.; 6. Return concerning value added – M.P.F.; 7. Statement for payment obligations to the social insurance budgets and special funds – M.P.F.; 8. Statement of duty – M.P.F.; 9. Summary statement on deliveries / acquisitions of foreign goods – M.P.F.	Transaction	Requires obtaining eID
Virtual Payments Desk (VPD)	Intended for consultation and payment with a credit card of taxes and other obligations to local and central budgets. At the time of the study, only to four institutions payments could	Transaction	Not necessarily requiring eID

Section name	Description	The level of development	Other relevant comments
	be made: 1. National Research Institute for Informatics; 2. Sector 2 Bucharest City Hall; 3. Sector 6 Bucharest City Hall; 4. Targu Mures City Hall.		
Electronic Procurement	It refers to the registration and use of the Electronic Procurement System. It has two sections, one for contractors and one for bidders. It provides the public institutions in Romania the possibility to purchase products, goods and services by electronic means and the operators the opportunity to submit bids for electronic auctions.	Transaction	Requires obtaining eID
Transport Permits	Electronic Information System for the Assignment of Authorizations for International Transportation facilitates the transmission of transportation permits for international routes. Actions that can be made electronically are: reservation permit, confirming authorization, authorization request and permit cancellation.	Two way interaction	The authorization is not transmitted electronically ; it doesn't require eID
Online forms	This section provides the forms used in relation to public administration. It connects with local institutions and Central Government; forms are available as institutions enter the system.	One way interaction	Very few institutions have enrolled in the program
Public institutions	Complementary to the previous section. Provides contact details of institutions that have completed the registration form.	Information	–
Press Releases	Brief information on the legislation underpinning the National Electronic System	Information	–
Government of Romania	Link to the Romanian Government Portal	Information	–
Ministries	Short presentation of Romanian Ministries	Information	–
Institutions under the Government's coordination	Brief overview of the institutions working under the coordination of the Romanian Government	Information	–
Local administration	Brief overview of local administrative institutions subordinated to the Romanian Government	Information	–
Senate	Link to the Senate Portal	Information	–
Chamber of Deputies	Link to the Chamber of Deputies Portal	Information	–
Romanian Presidency	Link to the Romanian Presidency Portal	Information	–
Legislation	Presentation of normative acts regulating the electronic services offered by the e-guvernare.ro portal	Information	–
IT antifraud	–	–	It could not be assessed because it

Section name	Description	The level of development	Other relevant comments
			was not usable
Thematic Catalogue	Provides a collection of links to government websites organized by topics of interest	Information	–
Postal Codes	Link to the Romanian National Postal Company Portal, used to identify an address based on the zip code	Information	–
Intelligent electronic forms system provided by the National Trade Register Office	Link to the National Trade Register Office Portal, used to transmit specific forms on verification registered information, registration of companies, the release of provisions, transmission of information or submission of financial statements.	Two way interaction	Requested documents are not transmitted electronically ; requires obtaining eID
Electronic payment for local taxes	Links to Municipalities that allow electronic payment of local taxes. Although almost all Romanian municipalities are listed, only those present in the VPD provides this service effectively	Information	–

Main Findings

Although most sections provide information or make links to the websites of major public institutions in Romania, initiatives such as the transmission of statements, using the Electronic Procurement System and the VPD show a high level of development. A fully electronically provision proves the existence and implementation of a framework that can be used to extend the number of such services. The recent introduction of VPD, which allows online payments for various fees and taxes, is an essential service in boosting the efficiency of these transfers for both citizens and authorities. It is remarkable the easiness of using this service, the interface being intuitive and highly accessible. The main disadvantage relate to the fact that so far only four institutions are available online.

Important efforts were also made for the services provided by the National Trade Register Office and those relating to transport permits. These services were assessed as level 3 – Two Way Interaction – that offers complete, specific forms of endorsement and transmission to the respective authorities, but the release of requested documents can't be done electronically.

The Section “Online Forms” falls in the 2nd development level – One Way Interaction – and enables the transmission of forms to public institutions. It requires the enrollment of authorities in the system.

The remaining sections are found at the first level which implies the provision of information. Many sections carry links to the most important public institutions in Romania, which are also used purely for displaying information.

While most services can be found in the first stage of development, the computer capacity, required for acceding to an advanced electronic sophistication, has been achieved. One reason of concern is the withholding of public institutions, local and central, to adapt their internal processes in order to enroll in the system and adopt the electronic mediation of the public services they offer. Four institutions in the online paying program is a tiny number, the proportion of citizens currently served does not justify the efforts of creating the framework needed for developing and launching this service. We should also mention the need to obtain a

certificate of digital identification by the users in regard with most services at levels 3 and 4 of sophistication, except the VPD application, not as an impediment but an extra step to be made by future users.

Level four is the desired and pursued degree of development in the National Strategy and, the fact that there is a framework that can be used to implement public services accessed online, is a major leap towards the electronic standardization which the Information Society of Romania wants to become part of.

5. Conclusions

EGovernment value will become increasingly defined by its contribution to the development of integrated administration, economic areas and segments of society. Inclination to citizens, inclusion of disadvantaged or marginalized communities, government connected, universal access and use of new technologies, are the benchmarks through which innovative public services will be provided and evaluated.

Our country made important steps regarding the creation of the framework required for electronic development and delivery of eGovernment. Applications such as VPD or the possibility of submission fiscal declarations are spearheads and also examples to be followed. However, the awareness of the necessity to adopt these processes from public institutions is at an incipient level. This aspect, corroborated with the low number of services accessible related to the 20 priorities established by the E.U., rank our country in the lower quarter compared to other Member States. It is important to determine aspects regarding the use of information technologies, especially behavioral aspects that influence the adoption of information solutions by institutions and the acceptance and use of the new communication and delivery channels by the citizens.

Regardless the stage of accession of the Strategy on Information Society, whether trying to adapt general policies of the European Union to effectively serve the shortcomings revealed by the reality of each Member State, aiming to streamline the creation of major public services or specific services needed by small segments, making steps to reduce public expenditure, assessing and selecting the best delivery channels or promoting a social cause, eGovernment is the tool which marketing can adapt and use for sustainably developing the public administration.

This paper aims to highlight from a conceptual point of view, some of the most important aspects concerning the implementation of eGovernment services and the ways in which marketing's science and tools can contribute to the development of effective long-term solutions. The assessment carried out in March about the level of development of public services available online through the portal "www.e-guvernare.ro" is a first step necessary to the development of more efficient and consumer-centered public services.

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SUB-SECTION: ECONOMIC INFORMATICS

MODEL DRIVEN DEVELOPMENT OF ONLINE BANKING SYSTEMS

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In case of online applications the cycle of software development varies from the routine. The online environment, the variety of users, the treatability of the mass of information created by them, the reusability and the accessibility from different devices are all factors of these systems complexity. The use of model drive approach brings several advantages that ease up the development process. Working prototypes that simplify client relationship and serve as the base of model tests can be easily made from models describing the system. These systems make possible for the banks clients to make their desired actions from anywhere. The user has the possibility of accessing information or making transactions.

Keywords: MDA, UML, Online Banking, Class diagram, Platform Independent Model

Cod JEL: C88, M15

1. Introduction

Data intensive web based systems, that in the most of their uptime do data processes have become a part of our everyday life. Several systems of this type appeared on the internet: webshops, online ticket shops, banks, etc. These are used everyday by users around the world.

In case of these systems design the target platform is chosen in the beginning as well as the technology used for the development. These are usually platform dependant application. After the development process, during the implementation process it often occurs that the system exceeds its boundaries and a new platform is needed. Often in this case the whole system needs to be recoded.

The importance of the present research consists of the fact that we can plan a platform independent banking system which can be implemented on any kind of platform. Furthermore offers the opportunity of generating a navigation model from the class diagram for the developers, giving real support to both developers and users. The final model can be applied to mobile applications too.

2. Model Driven Architecture

Model Driven Architecture (MDA) is a new type of view on application development. According to MDA you have to focus on the functionality and behaviour of the studied system, putting aside the technological environment. This way an application has to be modelled only once (Anand et al., 2010).

The starting point is given by the domain model (CIM – Computational Independent Model) which can be expressed by use cases like business objects, activities and tasks. This model is refined with thorough examination; this is how the PIM (Platform Independent Model) is formed. This layer already contains the objects specifications, description of their cooperation and expresses the object states and changes. Taking the environment into consideration the PIM undergoes some more abstraction, this time giving precise specification on the objects, their behavior, interoperability and reusability (Kennedy, 2006). The model layer that is to be

implemented is stated. The Platform Specific Model (PSM) is the base of the components creation and functioning plan. MDA separates application architecture from system architecture. Application architecture contains components and information that specificate the applicatipons functional targets. System architecture contains the low level components and links, that make possible the application architectures axecution. This separation is the base element of MDA.

Recoding of the application is not necessary, when a new technology appears, the application is simply regenerated to the new environment.

For a lot of popular platforms, like CORBA or .NET; PIM→PSM can be generated. OMG-s standard, MOF (Meta Object Facility), XML (Extensible Markup Language) and CWM (Common Warehouse Metamodel) ensure that MDA is a complete software development method (Raffai, 2005).

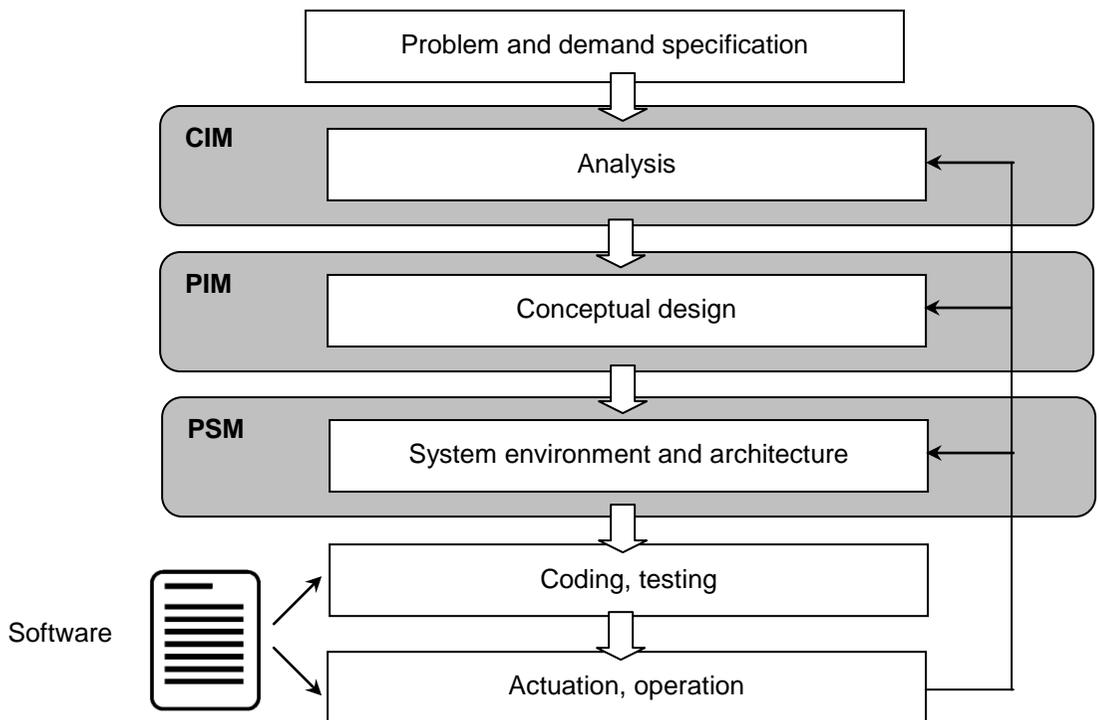


Figure 1: Model driven development

The lifecycle of online system developments base does not vary from the common method. Tasks have to be completed through the same steps, but thes define certain principles that define the products of different steps and specificate the models to be made.

MDA can be separated into four parts (Raffai, 2005; Anand et al., 2010):

1. As a first step the system has to be understood and the CIM model developed according to it (Kennedy, 2004). This models specification is usually a document signed by the user, containing diagrams and tables. So the product is a document that sepcifies the users demends from the application.

2. The product of the second step is an abstractization, that is still technology independent. The PIM model contains specifications on the system from the point of view of the most effective solution, it contains metadata from elements of the real system, these connections, structures, elements behaviour, tasks, interfaces and dependancy between elements. The making of the PIM

model is an iterative process, elements and their specs are refined continuously, they are tested for their functionality and compatibility with the system.

3. The next step is the definition of the environment and the transformation of the PIM model into PSM. This means that in terms of the environment we associate technology to every PIM element. More PSM models can be made from a PIM model, in condition of the platform that it is realised on.

4. The final step is the realization of the PSM model, the execution of implementation and testing processes, the creation of the whole model of the systems and giving information on its functionality.

In case of classic development, transformation of different models is made manually, while in model driven view these can be automated, speeding up the compilation process. Definition of transformation rules and their coherent use serve the solution of several problems. This way the modification of different applications can be made quick and documented, cooperating software can be attached. Implementation of concept models working on different platforms is more simple.

3. Methodology Proposed

We intend to describe the advanced design of online banking system by using the MDA paradigm. The standard development process consists of 4 steps, as previously presented. The research has been made through a case study, in which we design an online banking system, taking in consideration the next steps:

1. Demand analysis: by which the system's CIM model is designed;

2. Analysis and planning: at this point PIM model is designed conform CIM;

3. Realizing the system: finally PIM model is changed into a platform depended model which refers to the system's implementation;

These steps will be presented in the followings.

4. Case study: Online banking system

The system gives possibility to the banks clients to do their banking from anywhere. When a client opens a bank account he receives a username and a password, so that he can log into the system. This is a web based system; therefore the client can access the system from his home, workplace or anywhere. He has the possibility of interrogating his account or making transfers.

With the password given by the bank the user signs in on the banks website. Other personal information is given, like name, birth date, e-mail, etc. The server checks for credentials and logs the user in. The user can access different services.

It is possible to interrogate information on accounts, traffic for a period or to make transactions and pay bills. The system has to approve every step for security. When the client is done he signs out.

4.1. Demand analysis

Demand analysis is the process throughout which the type of the system to be designed is specified. The demand is a supposed ability that the system has. Demand analysis is not a simple task, especially in case of web applications, because these raise other difficulties:

- An application has to have more entry points;
- Only one detailed information can be offered to the buyer;
- Environment changes quickly;
- There is no predefined development target;

The development process always starts with the demand analysis, which contain functional demands, actors and their tasks (Avornicului et al., 2006). This is the part that is called CIM (Computational Independent Model).

Usage cases help to maintain our demands from the system and to ensure their integrity. Usage case diagrams describe a certain part of a systems behavior from the point of view of external actors. Actors are those who use the system or are responsible for their maintenance.

Actors of online banking systems:

- User: the person that uses the banks online services.
- A bank server: the user accesses his account and registers tasks through it. The server sends the information the user asks for.
- Bank account: the online version of the client’s bank account. It is a separate actor because every information and transaction depends on it.
- Recipient: in case of transfers the amount of money is transferred to the account of the recipient.

The use case diagram is as follows:

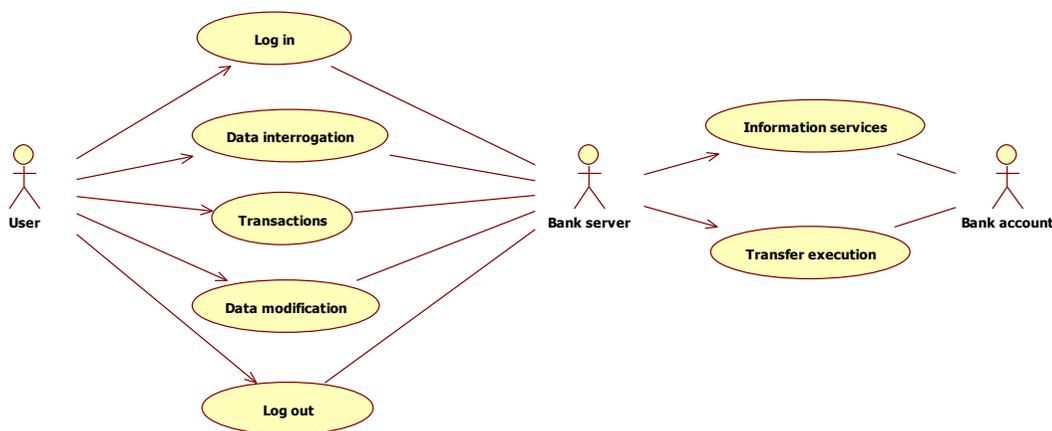


Figure 2: The use case diagram

Usage cases represent a chain of events, every mode that the client can use the system. The main parts of the system are the user and the bank server, executable tasks gather around them. Usage cases show how actors can use the system, what actions they have.

Interrogation and transaction use cases integrate more concepts. To avoid complex diagrams we will use the following keywords instead of drawing every detail separately:

- Sign in / sign out: the user signs in with his username and password into the internet banking system and signs out after he has done his work.
- Interrogations: the system enables the enquiry of information. This information can be: balance, traffic details, account information (date of opening, type, account number). Information is given by the server.
- Change of personal data: the user can change his personal data.
- Transactions: transaction can be made with the help of the server; these transactions can be transfers, payments of public services and other bills.
- Transfers: in case of transaction, the bank puts money from the users account to the recipients account.

4.2. Analysis and planning

The target of the analysis and planning processes is to prepare the plans based on the demand analysis that serves as the base of the web application. Throughout the analysis the non-

functional demands have to be taken into consideration, during the planning functional demands can be dealt with as well.

While planning the wb application, principles of MDA will be followed. The most important is the conceptual planning, while we build a model that contains concepts defining the application. The concept model is made from the CIM model, that contains specifications concerning the professional field. This is considered a PIM (Platform Independent Model) for it does not take into consideration any specific technology (Avornicului et al., 2006).

4.2.1. Class Diagram

The class diagram serves for the static illustration of the system, presenting the classes and their bondages. As a first step the objects are defined and then they are grouped into classes by their behaviour.

In case of an internet banking application the following classes are used:

- User: The users class contains information on the banks clients. The clients can be identified and logged in.
- Account: Contains information on the users accounts.
- BankServer: The Bank Server class contains the detail necessary for the banks operations.
- Transaction: Transactions that the system can handle.
- Verification: Control class validates the users ID and password.
- LogInWindow: The user logs in through it.
- MenuSystem: The menu is an interface between the systems options and the users screen.

After the definition of the classes, their extensions, connections and multiplicity the class diagram is built.

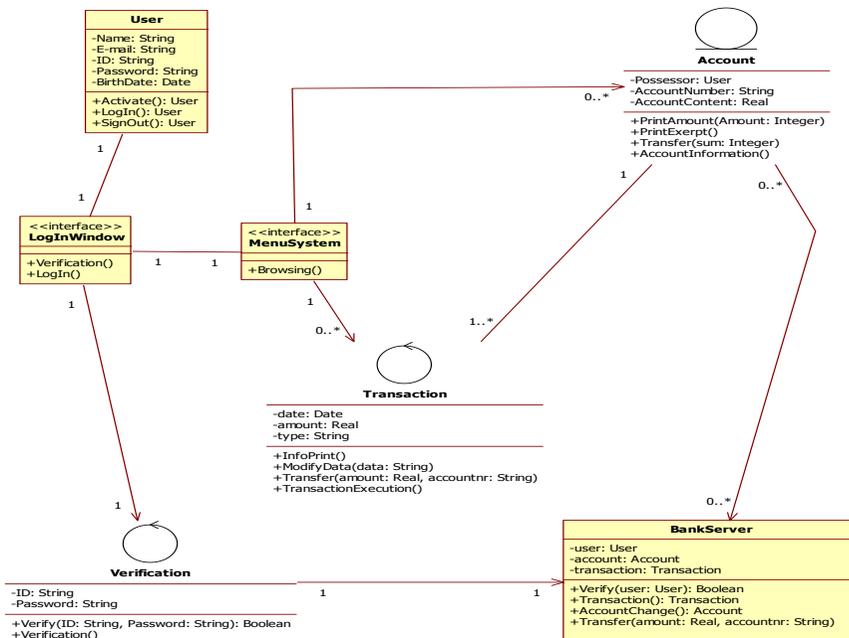


Figure 3: The class diagram

The class diagram shows the building blocks of any object-orientated system. Class diagrams depict a static view of the model, or part of the model, describing what attributes and behavior it has rather than detailing the methods for achieving operations (Anand et al., 2006).

In the conceptual design of a system, a number of classes are identified and grouped together in a class diagram which helps to determine the static relations between those objects (Frankel, 2003).

4.3. Realizing the system

Following the views of MDA this step is the transformation of PIM models into PSM, platform specific models. The transformation of platform independent models has more phases in terms of the point of view from which we analyze the web application. The goal of every transformation is to pair every action of the system with a technology capable of dealing with it. On certain platforms parts can be exchanged without affecting the systems functionality.

5. Conclusion

Designated time for design has been drastically reduced, so new solutions are needed to be capable of keeping up with demands in the world of developing technologies. Model driven architecture delivers tools that simplify the process of application development.

MDA follows and embeds the most technical standards, ensuring the developed systems flexibility and renewability. The most important fact though is that using MDA, software engineers and business professionals can communicate in a common language and reach goals using high end technologies.

The designed system can be implemented on any platform. Moreover every bank can personalize it, if necessary it can be moved on mobile devices.

The model-based development's only problem is that configuration data for example: platform definition data does not differ from modeltransformation because during.

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TOOLS USED IN DECISION MAKING

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Decision making is one of the important tasks of every manager. The process of taking decisions has to be based on knowledge. For optimizing this process some software solutions has been created. In this article we tried to summarize some of the features which exists in some software applications.

Keywords: decision making, risk solver

Introduction

Knowledge is the main source of competitive advantage in the knowledge economy and innovation in organizations involved in the services sector.[1] It's really about the transformation of information into useful data management process. We must keep in mind, however, that the speed with which information circulates, accessibility, search and how their storage are critical factors to be taken into account in streamlining decision-making.

Taking into account the likelihood of achieving results, several models are developed to optimize decisions, starting from the classification of decisions: decisions in conditions of certainty, risk and uncertainty. The elements that distinguish these types of decisions is very important for all - managers and software developers.

While the development of computer applications has raised no problems using established models in case of economic consequences known with certainty - ELECTRE, for example - the real challenge for software developers is to optimize the decisions of category risk and uncertainty.

In the service sector, as in any other field of economics, all computer application are based on the distinction between definitions of risk and uncertainty:

-risk is present when future events occur with measurable probability

-uncertainty is present when the likelihood of future events is indefinite or incalculable
(Frank H. Knight, 1921)

Between different algorithms used inside the software "Monte Carlo has become a standard tool of risk management" [PRO02]

According to Michele Gambera, the accuracy of the results is limited by the number of simulated histories. The process of simulation will be longer when we have more data. So, an important issue will be how fast a computer program can do all the calculations. New technologies which were developed will improve the speed of the calculations. Cloud computing is one of this technology. If we are taking into consideration cloud computing, we have to be aware that the algorithm has to be done in parallel and also if there are a mechanism of sending and receiving subsets of data between these processes. Monte Carlo algorithm is one which can be done in parallel computing.

In Monte Carlo simulation an important fact is the distribution which we used for our model. There is a lot of distribution which can be used like normal distribution, uniform distribution, triangular distribution and so on. According to an article of S. Savage, S. Scholtes, and D.

Zweidler “simulations without acceptable input distributions are like light bulbs without electricity”, and they observe very well that “Only a few people within an organization have the expertise to estimate probability distributions, and even fewer have the managerial authority to get their estimates accepted on an enterprise-wide basis”. One of their ideas was to manage probability distributions centrally and to replace the classical probability distributions with stochastic libraries a pre-generated random trials that approximate” stochastic inputs or can be the results of simulation and optimization models.

ProbabilityManagement.org has presented the DIST™ Distribution String which brings to Monte Carlo simulation, a data structure that contains thousands of Monte Carlo trials. These trials are compressed through XML, so that structure can be store in the single cell of a spreadsheet or in a field of a data base. The main advantages of DIST is that it can be generated by experts, to represent virtually any type of probability distribution, and then it can be distributed to others in a standardized format.

Other important concept is to use interactive simulation in your model.

Risk Solver Platform is developed by FrontlineSystems and is fully integrated with Microsoft Excel. This software can be used for linear and non-linear model, for conventional optimization, for decision tree model, for risk analysis and Monte Carlo simulation.

“This package was also the first, and as of this date, the most powerful interactive Monte Carlo simulation package for Microsoft Excel. For simple simulations involving a few variables, it can perform 100,000 trials essentially instantly, as the user changes parameters in the model.”
[<http://probabilitymanagement.org/Software.htm>]

Immediate after installation the menu of Excel will be improved with a ribbon with specific option for optimization and simulation, like it can be seen in the following figure.



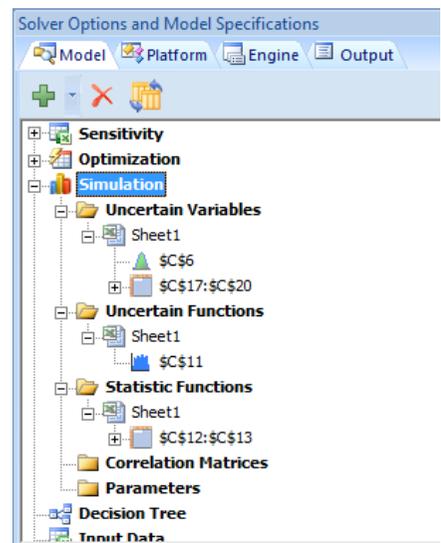
Also a Model Pane which consists of four tabs will be displayed in the right part of the screen. Model tab is used for seeing the description for the current model which can be one of Optimization, Simulation or Decision tree. Platform tab is used for defining parameters for Optimization Model, parameters for Simulation Model or parameters for decision Tree Model.

Engine tab is used for specifying engine which will be used in solving the problem. We can select from Standard GRG Nonlinear Engine, Standard LP/Quadratic Engine, Standard Evolutionary Engine, Standard Interval Global Engine, Standard SOCP Barrier Engine, Risk Solver Engine, or we can let it choose automatically which engine to use in solving the problem. Which engine should we use? Their recommendation is to try them all, and use the one that performs best on your model.[RISK01]

For every of these engine we can define some parameters which will be used, like Monte Carlo number of trials, the algorithm used for random number generations, number of iterations, Integer tolerance, Multi Start and so on. Integer tolerance is used to stop finding a solution in Branch and Bound algorithm, when the relative difference between the best found solution and the best possible solution is less than this value. If this value is set to zero, the algorithm will be stopped with the true optimal integer solution.

When Multistart option is set to true, methods for finding global solution to the problem will be used.

Output tab is used for displaying the results.



Nonlinear problems are more difficult to solve than linear problems. In risk solver platform an important advantage is that of using  (Analyze without solving) button, which will help us in finding the model. If the nonlinear problem is convex, the global optimal solution will be found.

For using this platform we have to be familiar with Microsoft Excel. The platform came with a lot of useful examples for optimization, simulation and simulation & optimization like Simple Business Plan Forecast Model with Uncertainty, an example illustrating modeling an investment fund's growth given uncertain return rates, an example illustrating modeling multi-period Inventory problems with uncertain demand, an example illustrating the use of Monte-Carlo Simulation to estimate workforce levels required to meet demand, an example illustrating use of Monte-Carlo Simulation in Airline Yield Management; this example also shows the use of a parameterized simulation model to arrive at good decision policies under uncertainty.

It is very important to mention that a useful package named Risk Solver Engine can be used to develop and deploy application to users.

Risk Solver Platform came with a set of functions which can be used for defining optimization models and Monte Carlo simulation models. According to their documentation most of these functions will be used for Monte Carlo simulation models, or for the uncertain elements of stochastic optimization models.

We have tried to solve a problem of making reservation to a hotel, in the following conditions. Our hotels have 50 rooms, and the price for a room is 39 EURO. In case a client will cancel the reservation, hotel will not refund the price of the first night of accommodation. In case the tourist will show up and no room will be available a compensation of 25% of the price of a room will be paid by the hotel for tourist accommodation in another hotel.

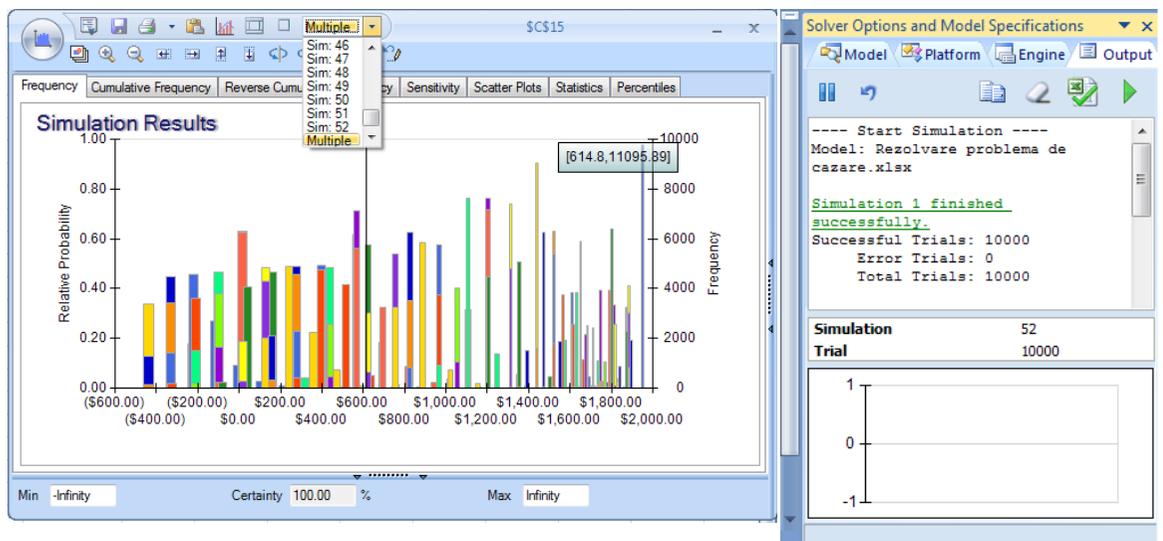
In less than 5 minutes we can create a model of our problem based on the model which is defined in YieldManagementModel2.XLS file. The distribution of cancelation will be a LogNormal distribution of 5% with a standard deviation of 2%. For this we used PSILogNormal function

which generates random number of tourist cancelations. We prefer this model because we can see exactly the evolution of simulation for each particular case, and we can make an idea about the algorithm.

3	Price/room	39						
4	Number of rooms in Hotel	50						
5	Number of cancellation	6						
6		5,945649429						
7								
8	Refund of cancellation	0%						
9	Overbooking Compensation	125%						
10								
11	Number of bookings	101						
12	Number of tourist which arrive	95						
13	Number of Overbooked rooms	45						
14								
15	Total Revenue	(\$243.75)						
16								
17								
18	Simulation Number	1	2	3	4	5	6	7
19		50	51	52	53	54	55	56
20		1832.9727	1870.027	1906.106	1917.375	1896.368	1859.364	1816.364

For number of booking we used `=PsiSimParam(C19:BB19)` which tell to Solver engine that a different simulation will be made for each value of a cell from the domain C19 to BB19. We also used `=PsiMean(C15,C18)` to define the expected revenue in each case of simulations. We also set the number of trials per simulation to 10000 for more accuracy. In less than 3 seconds on our computer we obtain the results to our problems which indicate us to use 53 rooms in the process of making reservations.

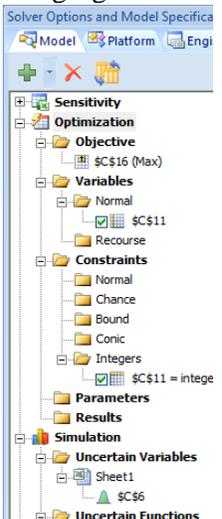
Another very useful thing is the displaying of the results which can be viewed and analyzed in a different window like the above one. We can combine multiple simulations in our analyzing or we can see the results for only one.



To solve this problem solver was simulate all 50 cases with 10000 of situations in 0.25 seconds.

The same problem can be solved if we define a simulation & optimization model. For this model we used only PSILogNormal and PSIMean functions as it can be seen in the following figure.

3	Price/room	39	
4	Number of rooms in Hotel	50	
5	Number of cancellation	2 CEILING(C6,1)	
6		1.940336761	PsiLogNormal(0.05*C11,0.02*C11)
7			
8	Refund of cancellation	0%	
9	Overbooking Compensation	125%	
10			
11	Number of bookings	40	
12	Number of tourist which arrive	38	
13	Number of Overbooked room	0	
14			
15	Total Revenue	\$1,482.00	MIN(50,C12)*C3-C5*C3*C8-C13*C
16		1917.39	PsiMean(C15)
17			
18			
19			



We define an maximum objective of C16, we put a condition that number of booking has to be an integer (we cannot book 5.34 rooms), and we also set that C11 is a variable, like it can be seen in the model above in the optimization section. Another parameters of the engine is 1 simulation

and 1000 of trials per simulation. We start with  button. Solver has found a solution in our case in 6.8 seconds after informing us that our model contains uncertainty, and Risk solver platform will analyze our formula to determine the best methods for solving it. Also it determine that our models is non linear in decision variables and cannot be solved by stochastic programming or robust optimization methods. At the end inform us that Branch & Bound algorithm has found the best of the locally optimal solutions. The results are 53 bookings like in the preceding solutions.

3	Price/room	39	
4	Number of rooms in Hotel	50	
5	Number of cancellation	2 CEILING(C6,1)	
6		1.301687502	PsiLogNormal(0.05*C11,0.02*C11)
7			
8	Refund of cancellation	0%	
9	Overbooking Compensation	125%	
10			
11	Number of bookings	53	
12	Number of tourist which arrive	51	
13	Number of Overbooked room	1	
14			
15	Total Revenue	\$1,901.25	MIN(50,C12)*C3-C5*C3*C8-C13*C9*C3
16		1917.43	PsiMean(C15)
17			
18			
19			
20			

```

---- Start Solve ----
Using: Full Reparse.
Parsing started...
Diagnosis started...
Uncertain input cells detected.
Attempting Stochastic
Transformations...
Stochastic transformation did not
succeed.
Reverting to Simulation/Optimatic
Using: Full Reparse.
Parsing started...
Diagnosis started...
Model diagnosed as "SIM NonCvx".
User engine selection: Standard GRG
Nonlinear
Model: [Rezolvare problema de cazari
2.xlsx]Sheet1
Using: Psi Interpreter
----- time: 6.08 Seconds
Solver found a solution. All
constraints and optimality conditic
are satisfied.
Solve time: 6.43 Seconds.
  
```

Another interesting part of Risk Solver Platform are Decision Tree.

Conclusions

1. Risk Solver platform can be used in solving different services optimization problems when we are working with uncertainty.
2. SAS can be mentioned as a leader on risk management for banking.
3. Using simulation & optimization it takes more time to Risk Solver Platform to solve our problem, but it is more easy to define the model and to interpret the results.

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MODELS AND SOLUTIONS FOR THE IMPLEMENTATION OF DISTRIBUTED SYSTEMS

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Software applications may have different degrees of complexity depending on the problems they try to solve and can integrate very complex elements that bring together functionality that sometimes are competing or conflicting. We can take for example a mobile communications system. Functionalities of such a system are difficult to understand, and they add to the non-functional requirements such as the use in practice, performance, cost, durability and security. The transition from local computer networks to cover large networks that allow millions of machines around the world at speeds exceeding one gigabit per second allowed universal access to data and design of applications that require simultaneous use of computing power of several interconnected systems. The result of these technologies has enabled the evolution from centralized to distributed systems that connect a large number of computers. To enable the exploitation of the advantages of distributed systems one had developed software and communications tools that have enabled the implementation of distributed processing of complex solutions. The objective of this document is to present all the hardware, software and communication tools, closely related to the possibility of their application in integrated social and economic level as a result of globalization and the evolution of e-society. These objectives and national priorities are based on current needs and realities of Romanian society, while being consistent with the requirements of Romania's European orientation towards the knowledge society, strengthening the information society, the target goal representing the accomplishment of e-Romania, with its strategic e-government component. Achieving this objective repositions Romania and gives an advantage for sustainable growth, positive international image, rapid convergence in Europe, inclusion and strengthening areas of high competence, in line with Europe 2020, launched by the European Council in June 2010.

Keywords: information society, databases, distributed systems, e-society, implementation of distributed systems

Cod JEL: O33, M15, L86

Introduction

The concept of "information society" is a very generous program that covers all sectors of government. The main goal is to create a society that includes all citizens' access to public services provided in electronic form, by increasing the capacity to use information society services, reforming the government operational models and increasing operational efficiency through appropriate use of information and communication technologies and the increase of competitiveness of the business through advanced use of ICT - Information and communications technologies.

The complexity of software applications is an essential property that derives from: the complexity of the problem domain, managing the development process, the degree of flexibility allowed by the software and problems that characterize the behavior of discrete systems.

Since the last decades of the previous century growth rate has been calculated mainly by tricks, by dividing tasks in the computer system, by introducing devices interrupt requests from the input / output or direct memory access (Lungu, Vătuuiu and Fodor, 2006: 45). Then specialized systems for digital imaging systems appeared that sought to compensate for insufficient speed through parallel processing, allocating each pixel in an image line of each unit of computing - a processor dedicated local operations from the image. This is how the first configurations of parallel computing and the first parallel algorithms appeared. One aspect of distributed processing which has been subject to attention in recent years refers to an environment in which they can engage cycles and spare storage space of the CPU tens, hundreds and thousands of networked systems to work on a specific problem that involves a very high processing capacity. Developing these processing models was limited however by the lack of attractive broadband connections and problems, combined with the real challenges of security, management and standardization. A distributed system can be defined as a group of independent computers that the user perceives as a coherent unit.

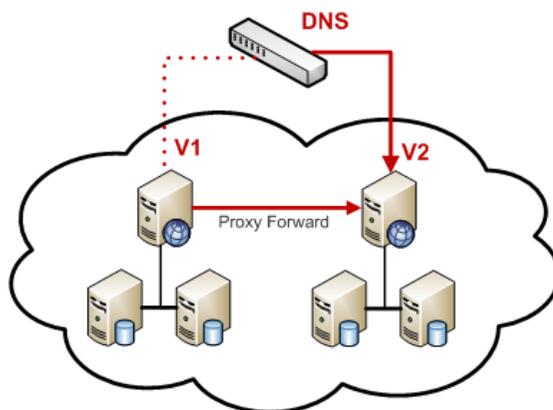


Fig. 1 Distributed storage and query of arbitrary data

A distributed system must not be built only because it can be built. There are many different types of distributed processing systems and there are quite a few challenges to overcome to successfully design such a system. Distributed processing systems aim to connect users and resources in a transparent, open and scalable way (Vătuuiu and Popeangă, 2006: 134). It would be ideal if this system would show more tolerance for errors and also if it would be more powerful than any combination of independent computer systems.

1.Parallel processing systems

Parallel processing is the simultaneous execution of the same instructions (divided and especially adapted) on multiple processors in order to obtain faster results. The idea is based on the fact that the process of solving a problem can usually be divided into smaller instructions that can be achieved simultaneously if they are coordinated. A parallel processing system is a computer that is equipped with more than one processor for parallel processing (Lungu and Ghencea 2011:122). Also new multicore processors are parallel processing systems. There are several types of parallel processing computers. They are differentiated by the type of interconnection between processing (known as "processing elements"), between processors and memory. Besides the classification made by Flynn who consider the type of processor instructions executed, there is a classification that is based on how memory is constructed: parallel processing computers that have distributed memory have multiple processors which access all the available memory like an addressing global space; computers which processes in parallel and have distributed memory with multi-

processors, but each processor can only access local memory - no global space for memory access between them.

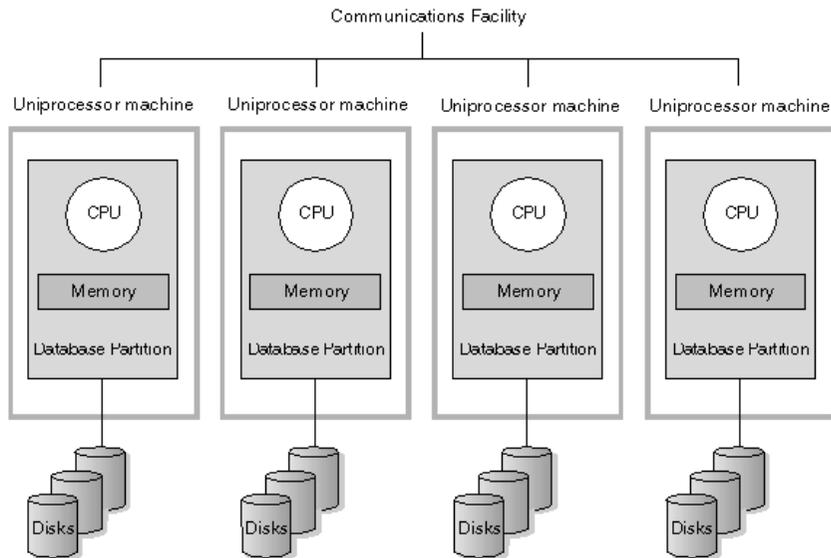


Fig. 2 Parallel processing systems

1.1.Implementation of parallel processing for different computer systems

Parallel processing, defining two or more processors that execute concurrent processes and acts as a single unit, allows one to run complex applications.

Most management systems relational databases are currently being upgraded to take advantage of parallel processing in heterogeneous systems, and to allow complex run of mission-critical applications. The optimal distribution of data is difficult in terms of technology; this process can be strongly dependent on the requirements for ensuring a good response to requests, and ensuring data integrity, continuous availability, interoperability, etc.

Management systems of modern databases use a series of abstract concepts and strategies to meet the requirements associated with current applications. The transaction, for example, can be used in the distributed data network to ensure the passage of groups of data and associated operations from a client post to server or from one server to another. Most of the producers of databases have monitors for the transaction process (TP - Transaction Processing) which represent advanced tools to manage distributed transactions in heterogeneous networks (Cristea 2007:44). The standard method of communication between TP monitors and database systems has been accepted as Protocol X / A as part of a group of standards X / Open. Currently, Sybase System 10 servers and Oracle 7 supports protocol X / A, while indirectly Informix Online adhere to this protocol through an ancillary product, Informix TP / XA.

In terms of ensuring data integrity in systems client / server distributed management software vendors have addressed these databases strategies:

- The "two-phase commit" technique: all changes required by a transaction on a database are either committed (the execution of the transaction is completed) or void, with the return of the database to the previous state. This strategy is not suitable for complex heterogeneous networks in which the probability of failure in any node is large and mission-critical systems. It is used as a way to ensure that all servers hold identical copies of the database at any time;

- The data replication strategy is now a solution adopted by Oracle, Sybase and Informix. Replication is a process in which multiple servers hold many identical copies of a database. The replication strategy differs significantly from the database "two phase commit" in that it guarantees the identity of copies of distributed databases only at certain times or under certain conditions. The data replication technique used by the Oracle Server 7 is called "Table Snapshots" by which the central server (master) copies at certain moments of time only those parts of the database that have changed, then disseminating these changes in the network. The replication mechanism used by the server is Informix database with the method "snapshots" used by Oracle. Informix uses the file "log" to "backup" to yield data from database tables to be replicated.

Replication servers are only the beginning of a whole generation of software that implements the abstract concepts related to data sharing in heterogeneous environments with advanced management and parallel processing, optimizing transactions.

1.2 Distributed Parallel Processing in Neural Networks

This type of processing is done using:

- Processing units: by analogy with the human brain, they correspond to neurons, and collectively to concepts such as character, features of pictures or objects in a PPP scheme. Individual units do not interpret the detailed design; they can be represented only by groups of units. We obtain a robust architecture that is not dependent on the efficiency of individual units and which assigns responsibility;
- Connections and the rule of activation;
- Internal input data (usually spread);
- External input data;
- Results obtained from processing units.

1.3.Open Distributed Processing

Open Distributed Processing (PDD) is the ISO standardization effort in the field of distributed processing. PDD 10 746 is the set of standards produced by ISO / IEC and ITU-T X.900 products (Telecommunication International Union). The notion of distributed processing seems very technical and complicated. However, with the development of large coverage networks, distributed processing is increasingly used. PDD's goal is to facilitate the use of distributed processing in areas as diverse as the wide deployment technology (Tannenbaum and Steen 2006: 241).

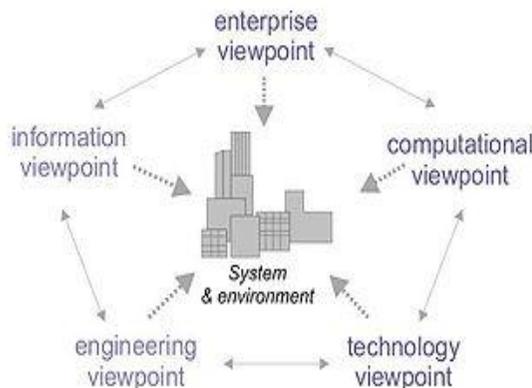


Fig. 3 Open distributed processing model

PDD is easy to use by programmers and operators because of its nature and means of distribution. In other words, both programming and use of distributed applications is presented as if that application would not be distributed. The way to get this perspective is transparent homogeneous PDD. Transparency provides users and developers with a consistent view of the network system as in the case when a message can traverse several different networks, without the user knowing the details of this process; distributed processing may involve different areas controlled by different authorities and equipment heterogeneous with very different hardware and software.

In general, the difference between distributed and network solutions is that when working in a network, the user is aware that the system runs on multiple machines, while in case of distributed processing the system appears as a single entity.

2. Implementation of Distributed Systems Solutions

2.1 Company Informix, symmetric multiprocessing

Informix Company has made a complete redesign of the system or introduced incentives for symmetric multiprocessing (SMP). Informix Online, is a dynamically scalable architecture (DSA). In situations in which the Informix server used version 6.0 of parallel processing, performance increased in comparison with older architectures. Informix Server version 6.0 of parallelism is allowed only on certain operations (create indexes, sorting, backup, data recovery) and runs on some platforms of symmetric multiprocessing (SMP). -Online/DSA Informix server (Dynamic Scalable Architecture). Version 7.0 has a scalable architecture that can manage scans, unification (join) the parallel sorting and querying databases.

2.2. Oracle 2.2 - parallel processing technology

Oracle 7 parallel Server creates a good balance between the need for better management and a multiprocessing system. Both Informix and Sybase disks require special partitioning in parallel processing, unlike Oracle, which is regarded as superior in this regard. The Oracle 7, Version 7.1 automatically maintains multiple copies of the same data on multiple servers, which eliminates the need for intensive disk-partitioning labor. Parallel query options in the Oracle Server 7 allow machinery working in symmetric multiprocessing (SMP), in clustered multiprocessing and massively parallel processing (MP) to execute a single application on multiple processing units, thus providing an almost linear scalability with each processor added to the configuration.

2.3 Sybase - Build Monumentum

Sybase company made a major step in designing database systems from the new generation by launching a product with "multithreading" work features. Sybase Build Monumentum runs in several ways to control the execution on both platforms -Windows NT and UNIX platforms, while adding to the existing architectural features for working with object-oriented database. The multiprocessing on distributed networks is done however only from the "client" point of view. Build Monumentum has an administrator who manages the "multithreading" processes even if the host operating system normally does not support this.

2.4 - IBM DB2 Parallel Edition

IBM developed its system of relational database management, DB2/6000, in a parallel multi-processor architecture with hardware ranging from local networks and systems to single processor RISC System/6000 IBM Power Parallel Systems SPX. Parallel Server DB2 Parallel Edition database can efficiently handle very large databases using strategies of sharing data and applications on their parallel execution.

The DB2/6000 management system extends to support a "shared nothing" architecture selected for two reasons:

- It is a scalable architecture to the level of hundreds of processors;
- Provides high portability because it requires only one communication link between processors, so it can be ported on any platform.

In the "shared nothing" architecture with the parallel implementation of the management system DB2 in a network of machines RISC/6000 IBM, database storage is done in a network of processors that provide buffers, lock structures, files log and separate records for each process. This prevents competition on cache structure resulting from the fact that all processors share the same set of resources.

In the architecture with multiple processing nodes, for large databases, data placement becomes a complex problem and system administration can be difficult. The implementation of parallel systems using a DB2 requires a definition language and management tools necessary for data partitioning. DB2/6000 provides two important features for partitioning large database tables: the use of partitioning keys and groups of nodes for a database that contains several tables; the user who develops the application can define a partitioning key for each table.

Conclusions

The internal administration of distributed databases is demanding and generally difficult, because one has to ensure that:

- Distribution is transparent (invisible and unobtrusive) - users must be able to interact with the system as if it were a non-distributed one (monolithic);
- Transactions must also have a transparent structure (invisible and unobtrusive). The course of each transaction must maintain database integrity, despite the multiplicity of partitions. For this they are usually divided into several transactions, each of them working with only one partition.

These requirements lead to the harmonization of the smart development strategy for Romania, in line with the priorities of "Europe 2020". Europeans should have the chance to use services on networks that are equal to or better than those available in other countries. In this direction have been made following steps:

- In 2010: adoption of a Recommendation to encourage investment in next generation access networks (NGA).
- In 2011: Monitoring of the implementation of the NGA Recommendation by national regulatory authorities and Monitoring of NGA deployment and broadband competition in the Member States.
- In 2012: guidance on pricing and/or costing methodologies in national regulatory measures.

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IT&C AND THE PERSONAL DEVELOPMENT

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In this paper I explore the phenomenon of personal development in an „unconventional” way. The contribution of this paper is to use a different method (i.e. in –depth interviews) to focus on a different unit of analysis (i.e. managerial couples) in a different context. In addition the information and communication technologies (IT&C) are entering all the fields: business, state institutions, education and the day-by-day life. This paper contributes to the field by suggesting a different theoretical approach to personal development conflict as a decision-making problem. I propose using social exchange theory to explain personal development conflict as a complex evaluation of cost and benefits of exchanges between multiple actors on the basis of personal values and beliefs. The critical thinking is one of the most popular learning objects in the English speaking countries and they are also offering most of hopes to distance learning and also the critical thinking is a reflective one. This paper suggests that the field may be overlooking some fundamental variables. Content analysis of the interview transcripts reveals the crucial importance of implicit values and benefits, immanent or tacit actions such as decision-making and learning and communication and mutual understanding. Communication and personal development is essential in this respect. It’s difficult to separate work, family and personal development and communication is fundamental in all directions. To conceptualize personal development conflict as a decision-making problem while taking into account exchanges and interactions between multiple actors and we can draw on equity theory or social exchange theory.

Future research should test whether decision making is central for the understanding of personal conflict only in managers or in other collectives as well. I recommend the couple as the best unit of analysis to address issues such as accommodation within couples and complex decision-making in both individuals and couples. Future research should draw on boarder and different samples to replicate our study and check the generalizability of its findings - because if it can be generalized it may have strong implication for theoretical development.

Keywords: e-learning, critical thinking, IT training

JEL Classification codes: M15, O17

Introduction

The information and communication technologies (IT&C) are entering all the fields: business, state institutions, education and the day-by-day life. Applying the Internet technologies the whole learning concept is changed reducing a lot the costs regarding the preparation and learning, and the costs of displacement of the professors an student as well. The forums and discussions are allowing the fast information exchange between students and between professors and students as well. The possibility to have on-line courses at scheduled days and hours, by multimedia facilities offered by the Internet infrastructure: on-line image (video camera), sound, chat can be done either by an independent treatment of students taking into account their aptitudes and results or by very high audience courses (hundreds/thousands of students simultaneously).

The extremely low costs level of a course is that it's not necessary to have a classroom, the number of students it's not limited because of the classroom's capacity, the teaching materials are virtual (photos, films, sounds, and so on) but also every student's or professor's possibility to customize the used interface to meet his needs of an easy administration at any level of detail and anywhere a computer connected to the Internet is available offers the possibility of the access to use or administrate both in fixed positions (computer, desktop connected to the Internet) and mobile ones.

In this study I will focus on managers because I expect that they are a group that, because of nature of their work, experience high level of personal development conflict. More specifically, I will study managerial couples, i.e. couples of which one or both members have managerial responsibilities. Managers may be expected to experience more time-based personal development conflict because they have to devote more time to work and show a high degree of availability and flexibility in their job. They can also be expected to experience more strain-based work-family conflict because of their responsibility for resources and people.

1.The critical thinking in the field of personal development.

The critical thinking is often associated with the philosophy but it can be closely associated with informal logic. The critical thinking is one of the most popular learning objects in the English speaking countries and they are also offering most of hopes to distance learning. The critical thinking is a reflective one. The one who thinks critically thinking's(interferes, deliberates) reflectively. But what does it mean to be reflective thinking so that it is also critical?

The critical thinking is reflective due to the fact that it follows its own progress, it evaluates each of its steps to decide if it is or not justified then it corrects its own mistakes. The critical thinking is not perfect because the one who thinks critically also makes mistakes. But the process of self-observations and self-correction through which always passes the one who practice the critical thinking makes him to commit fewer mistakes than those who don't think critically. The critical thinking is often erroneously considered to be a negative and destructive thinking. If we look at the relationship between the critical thinking and belief we can notice that the purpose of critical thinking is not to destroy the belief; what is wanted is to get to a reasonable belief. The critical thinking is not the negative thinking opposite to the positive or creative thinking. The one who thinks critically asks questions but it asks them to decide what's reasonable to believe.

Obviously, the critical thinker is not so stupid to believe in all he's told but he's not so skeptical to believe in nothing he's told. What's doing the one who thinks critically is to distinguish between reliable and questionable witness and he weighs the evidence to decide what's reasonable. When we bring evidence and arguments in favor of an opinion or belief, the result is reasoning (an argument). The opinion or conviction is the conclusion of reasoning. The activity to analyze if the conviction is in fact supported by the evidence or the invoked reasons is called the analysis of the argument.

The critical thinking is dealing with reasoning and arguments. On the one hand, it analyzes the already made arguments seeking to discover their mistakes and, by the other hand; it builds reasoning or counterarguments. The model is the Socratic method: to critically think is to primarily learn to listen to the other ones. To listen to what the other says means attention, concentration and also respect. Critical thinking is also to try to understand what the other one is trying to mean. The criticism is not made for the sake of destroying the other one's arguments but for the sake of clarifying them. These arguments are sometimes wrong and that's what critical thinking teaches us to detect. Once again the model is the Socratic conversation. We listen, understand, respond, discover mistakes and, finally, we are building ourselves (or together) the right reasoning.

“To misunderstand”, to make a mistake is not only frequent, is – however paradoxical it may seem – necessary and so the knowledge begins. You cannot start by knowing, only your own ignorance’s achievements can make you look for. If the answer I find to a question is wrong where is the right answer? The true knowledge starts when you realized that the error was an old lesson. Nobody taught it better than Socrates. The Platonic dialogues called “Socratic” are a wonderful example of the essential value for knowledge that has the recognition of own ignorance. Socrates’ demonstration of *Alcibiade* you cannot know a thing unless you have learnt it (it’s about how to become a politician); you haven’t learnt it from others during school because it’s not taught in school; you’ve had no democracy teacher. You haven’t learnt it by yourself because there was no moment when you realized you didn’t know it and so you start looking for it. So you cannot become a politician because you have no skills for that. This is an argument. Socrates shows Alcibiade that he cannot become a politician because he doesn’t know what a politician has to do (or not to do), because he’s unprepared and he has never thought about that. Different ways to express an argument by which not every attempt to convince is an argument. The reasoning or arguments are some special forms of human communication, different by the others by the fact they are organized according to logic rules (or laws). Therefore, we are saying about arguments that they are *correct* (if the persons who formulate them know the rules or laws after which they are formulated) or otherwise *incorrect*. In logic, at this point, the discussion should be ended. If we formulate a wrong reasoning there’s no place for discussions an interpretations. However, in day-by-day life things are more nuanced and there are situations in which the formulation of a wrong argument doesn’t close the discussion. This is happening in almost every dialogue and sometimes the simple incorrectness doesn’t stop to argument but it’s insisting to convince and to eventually have the possibility to repair mistakes which are realized by education and self-learning.

2.E-learning – way to personal development

By promoting a digital image of the information society, in learning subsystems the hardware component is represented by computers and the infrastructure obtained depending on the way of interconnection, the software component is reflected through learning system while firmware will be the impress of the institution providing learning services.

More broadly, by e-learning is represented the totality of learning circumstances in which the means of the information and communication technology are significantly used. The term, took over from Anglo-Saxon literature has been extended from the basic etymological meaning to learn by electronic means and it is now covering the area of intersection of educational activities with modern electronic means. So defined, more that e-educational, the semantic area of e-learning concept interferes with and infinitely variable overlaps a lot of terms that capture the variety of teaching experiences that can benefit from technological support: assisted instruction: computer – mediated, digital/mobile/on-line learning education, training through multimedia and so on.

Known as educational teaching software, a wide range of electronic materials (on digital media) are developed to make easier the procees of learning; maps, dictionaries, encyclopedias, educational films, presentations in different formats, books (e-books), tests, tutorials, software simulations that form skills, software practice, educational games and so on. The computer and the multimedia electronic materials are used as a support in teaching, learning, evaluation or as a mean of communication (to carry out some individual tasks and so on).

Children are increasingly earlier taught to use the computers in ontogenesis. What and how will the computer influence the child’s cognitive and social development? There’s a series of fears of addiction or social isolation, phenomenons influenced by the use of the computer but these ones

can be counteracted by a series of researches whose conclusions can be summarized by the advantages of a more productive and motivational learning.

E-learning represents a kind of distance learning, as a planified and organized teaching-learning experience. The mediation is done by the new information and communication technologies – mainly by the Internet. The Internet represents both the medium of material's distribution and the communication channel between the involve actors. For the time being functional only in the higher education and in adult's education, the systems of Internet training adapt the components of the traditional teaching approach/ face to face: planning, specific content of methodology, interaction support and evaluation. The extensions brought by the technological medium, insufficiently explored and used, refer to:

(a) *student orientation* by custom training course – the different composition of learning objects depending on the needs of each beneficiary – by *training individualization* – non-linear structure of the information, with the possibility of returning to more difficult content following the automatic identification of gaps – *autonomy* by eluding a pace, spatial independence and induction seminars;

(b) distributed resources, using and integrating access to electronic libraries and media by training specialists in student's discussions;

(c) fluidity of roles by the continuous balance of the educated-educator role within the learning group, by the continuous restructuring of learning teams depending on interests or task's efficiency criteria.

The training within the field of information technology and after that the training using this technology is different stages within the process of the information society's development. The development of some specific training solutions led to the foundation of new concepts in this field, which started from the solving of traditional problems with new tools (electronic manual – ebook) getting to the development of some new problems linked to the replacement of the bureaucratic structures with educational organizations and the construction of some specific mediums such as e-learning, promoted as a paradigm of e-learning. An e-learning system (of distance training or virtual education) consists in a planned teching experience – learning, organized by an institutions that provides materials in sequential and logical order to be assimilated by students in their own way without any constraint on the co-presence or synchronicity activity. Mediation is done by different ways, from media materials (memory sticks, CD/DVD or eventually by classical correspondence) to transmission technologies of the contents via Internet.

The education and training task based on the latest information and communication technologies is not to prove that it has immediate results in a race with other types of educational systems but to substitute a part of the current structures with a new, probably superior performances spectrum in meeting of inherent changes taking place in culture and civilization.

The new medium created by the Internet and supported by current technologies permits the improvement of traditional teching an learning principles by bringing to them a series of innovations:

- asynchronous learning;
- synchronous learning, where students and professors are learning on their own or in supervised groups;
- learning focused on student or professor, depending on whether the student or the professor occupies a position which determine the pace of progress;
- individual or group learning, benefit of the advantage either of the unidirectional attention or of the benfits and iinfluence of a group;
- informal communication, create opportunities and 'institutions' on the online learning platform in order to exchange information (cafeteria);

- the online library which not only allows books and magazines but also links to internal and external databases, to audio and video flows, and so on;
- online exams similar with extemporals and tests that are created by professors and scheduled either by professor or student, depending on learning system;
- the management of learning is achieved through modern methods of controlling the process of teaching and learning that adapts to a large public.

By the strategy of Lisbon which has as horizons the years 2020 is wanted to be ensured an employment rate of labor of 70%. In terms of global economic crisis the demand for manpower in Romania expressed by the indicator „quarterly rate of job vacancies” continued the downward trend.

The European e-learning market will reach USD 10 billion until 2012. The content market will be the dominant segment for the next period. The next segment as dimension will be the services one which will have the highest growth. Analysts believe that as the market consolidates instruments will become common and they will be a part of end-to-end solutions. European market for IT training services, however, remains fragmented, the number and variety of providers being huge in all the countries. Many alliances and partnerships between companies with complementary skills in e-learning are created -and some of the major providers of e-learning has expanded on the market both geographically and in terms of e-learning offer. It is expected that these trends continue, however pointing out that the market will remain fragmented so that approximately 75% of corporations will have developed platforms LMS (learner management system).

It is believed that these platforms of education will become just as prevalent as CRM and ERP systems are in present. The sectors which most rapidly embraced the e-learning are the industry, healthcare, education, government sector, banking system, followed by transport, telecommunications and media. Economic difficulties stimulate investment in education and IT training. According to analysts annual rate of growth in global revenues from IT education and training will be 55 billion USD in 2012. But growth rates will widely vary depending on region. It's considered that in their tendency to reduce costs some companies, will invest more and more in training IT specialists as having well-trained specialists in the latest technologies is essential for companies to reinvent their business model, make Internet strategy, reorganize their supply chain and try to remove one of the biggest problem of IT departments, the lack of sufficiently trained staff. Worldwide the United States and Western Europe will remain the largest market for IT training. Together, these two regions will represent approximately 75% of revenues from IT training. It is estimated that e-learning will determine much of the market's growth of IT training because the providers develop an ever-growing high-quality offerings and more end users have access to these offerings.

3.Globalization in the Information Society

The information society is the society based on the Internet. Globalization is also a consequence of the Internet as a priority. Then we can say that globalization is a phenomenon specific to information society. Because of the link between information society and globalization, which justifies the claim that globalization is a natural consequence of the information society, whereas the information society is proved to be a process that can not be stopped, globalization is also an inevitable process.

Along with the increased data processing speed and their storage capacity, have led to the development of custom user, and as a key factor, they have been interconnected, ensuring communication between two users, then at the group level and after that between community users developed by Intranet, Extranet or globally, in an open system, resulted as digital a reflection of the social system through the Internet.

The complexity of the information systems and their quite long making timescale are causing a series of problems which have to be taken into account and solved so that, the expected results are finally got.

First, during the development cycle of the information system changes occur within the managerial team of the beneficiary. In case a new managerial team has another vision upon the agreed indicators on which its decisions are based, changes in specifications occur, involving modifications of the information system's structure.

Secondly, the latest information technologies that appear require the ongoing adaptation of the information systems development team. Changes occur in the approach of the assistance tools and in the use of the options. Using the latest resources, a series of components are finally designed. The information system becomes inhomogeneous in terms of technologies of development.

Thirdly, the development of the company by purchasing new equipments, the reorganization of the production flow, the transition to the making of new products, the introduction of the elements of total quality management come to influence the structure and functions of the information system in terms of quality and amount. The problem of data acquisition acquires a new dimension when it comes of tools with programmed command or in case of robotic production lines.

Fourthly, during several years, the team of programmers, web designers, testers and implementers undergoes itself modifications. Different specialists reunify the team. All these fluctuations are reflected in the working system, in the quality of components or stages of the information systems.

Fifthly, the economic environment, the legislation and the dynamics of the processes of the information society leads to evolutions that have to be reflected in the information systems. The modifications of some calculation algorithms, the need to use new coefficients, the appearance of some information exchange between the company and the public institutions of state also have to be reflected in the information systems being designed.

The Internet was also the result of social interaction among experts, institutions, states and an extremely large number of users worldwide, and only in this context it was possible as a technological and social invention, only in this context he acquired today's form. It is natural to think that globalization, as a result of the Internet takes the form at which all the globalization participants are involved. This is the lesson of the Internet, which has proved to be great success in technological and social history of mankind, showing the path to be followed by the globalization process so that all participate in ways that will have to be largely generated by the users of globalization. Like the Internet, globalization cannot be strictly hierarchical to be a success for human being. If the Internet is not hierarchical, the globalization, naturally, will not be hierarchical, ensuring, as with the Internet, general coordination forms to establish rules of conduct acceptable to all, which could only be possible in a knowledge and perhaps consciousness society.

4. Conclusion

The premises of creation of the information society were insured by producing a massive and rapid spread of electronic computers, which allowed the individual, organization, nation and society the processing of a growing volume of data in an increasingly lower time and in an open space.

The globalization process has not found its balance and natural course, although he is driven by the increase of the Internet and its use in the economic, cultural and social life of the world.

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RESPONSIBILITY FOR ETHICS IN IT&C

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In this article the authors aim to create a presentation of the triangle morals-ethics-responsibility with an accent on the current globalized society. Business ethics has to disseminate in all the corners of a company, and first of all it has to be understood. Understanding the moral criteria of behaviour in business is important because the new Organizational structures create new complications, related to information flow and information administration inside various workgroups and in the entire organization, for which there are no traditional precedents.

KEY WORDS: business ethics, corporatist social responsibility, ethical investments, green energies

JEL Classification codes: M15, O17

Introduction

The term ethics has at least three different meanings. First of all ethics refers to the so called manners, customs and traditions specific to different cultures. Business ethics implies introducing in daily decisions and in management strategies more norms than the law requires. P. V. Lewis defines business ethics as „that set of principles or arguments that should govern the business behaviour, individually or collectively”. A company that is socially responsible, that is it takes into account not only the interests of the shareholders but also the interests of all the groups affected by its activity, so business ethics is a cost and implies delegating resources from the trajectory imposed by a strict computation of economic efficiency.

Eudaimonia means happiness, and the first to talk on this theme was the philosopher Aristotel in Nichomahic Ethics where he talks about virtue that is needed by people to lead the best possible life. The main idea of Aristotel is that there are different opinions about what is best for people and these differences have to be resolved. The question is: What is good? Aristotel doesn't look for a list of things that'd be easy to make, Aristotel looks for the highest of the goods and considers that this, no matter what it'd be, has three characteristics: it is desirable in itself, it is not desirable for another thing, and all the other things are desirable for it. Nobody lives for a certain goal except the one of goodness. And all the subordinated aims, as health and wealth are wished for the reason that they promote good and because they are good in themselves.

The problems and the opportunities created by the new technology, by the globalization process, by the privatization of the media raises new ethic and spiritual challenges for those who work in social communications. These challenges can be effectively met by those who accept the fact that, in order to serve a human being, building a community based on solidarity, justice and love, and presenting the truth about the human life are and will remain aspects central to ethics.

The increase in the importance given to business ethics can be explained through the changes suffered by the strategies and the structures of the corporations. Recent currents in the managerial theory and practice, as total quality management, as well as restructuring and redimensioning processes for top companies left to abandoning many traditional practices for managing economic processes. Intricate and rigid managerial hierarchies have been considerably flattened. As a consequence, the authority and the decisional responsibility have been dispersed more and more inside the company: important decisions are taken at lower hierarchical levels and by more

employees. That's why it is required that each employee, not just the management, should understand as well as possible the complexity of the problems and how they should be reflected in the practical behaviour of the company in the economic environment.

Business ethics costs: money, human resources and time, expertise, opportunities, as investments or development. Moreover, business ethics and its most visible form, the social involvement of the companies, are options that are not required by law. In the classical form of the corporatist philanthropy, in the regulated form of donation and sponsorship or in the modern form of corporatist social responsibility integrated in the management strategy, the social involvement of the companies has been perceived for a long time as a less and less necessary cost, a luxury of large corporations.

Business ethics consider businesses from a larger perspective that is all the members of the society have different material needs that they have to satisfy in the economic system, through production activities, services, distribution, repairs etc. Businesses are not the only possible way to satisfy these material needs. They appeared, during the rise of the capitalism, as the most efficient solution to sustain a rapid and constant economic growth (although not lacking in crises and difficult periods), an increase in the economic efficiency, of quality and the variety of products and services, a relative or absolute decrease of prices etc. It is essential that the society doesn't exist for the business people to profit from it, but on the contrary, it exists to support social needs.

1.Social responsibility and the new dimensions of globalization

The social responsibility of an entity means what the society expects from an organization from an economic, legal, ethic and philanthropic point of view at a certain moment.

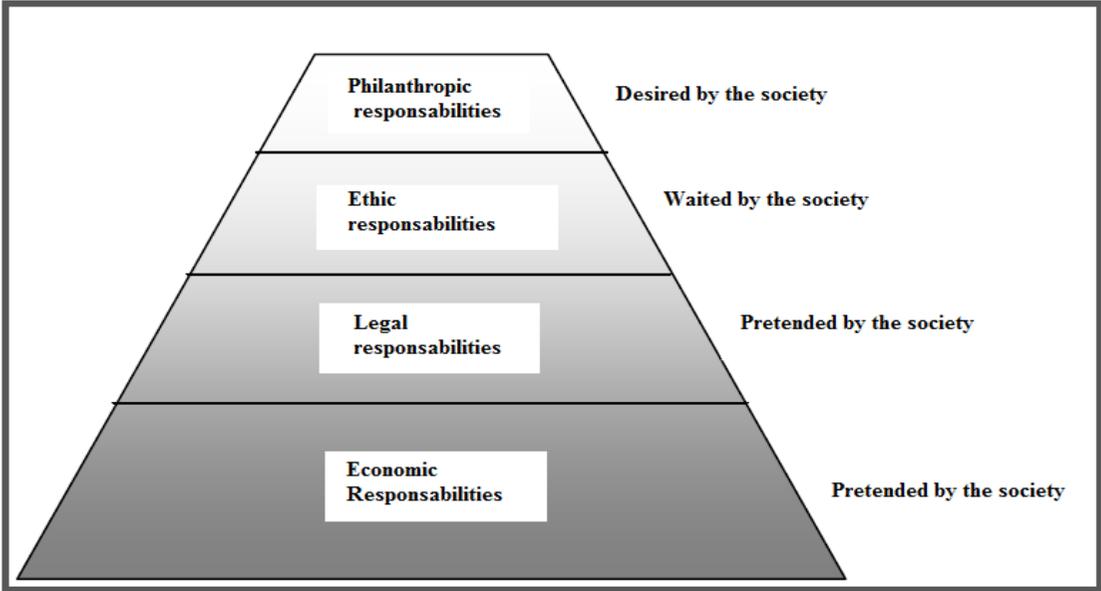


Figure 1 Level of ethic

Social responsibility is a concept regarding the contribution that companies have to have at the development of the modern society, and it is also called *corporate citizenship, corporate philanthropy, corporate societal marketing, community affairs, and community development*.

International states and institutions realized that the assimilation of the principles of social responsibility by the companies serves the objectives of durable development and led to the appearance of international standards for defining what means „desirable corporatist behaviour”.

United Nations, European Union and the Organization of Economic Cooperation and

Development are the most important institutions that committed themselves in creating a framework for defining social responsibility and for establishing indicators through which they can be evaluated in a transparent way. This framework has been accompanied by recommendations and principles to guide the states and the local authorities in formulating public policies that could promote and ensure transparency and support social responsibility initiatives. Without being perceived as a sign of economic power, social responsibility takes now a form of corporatist civics – a way of keeping the business relationships stable and profitable for all the parts involved, a non-aggressive way, a least detrimental functioning way next to a community, a friendly way to communicate with the society. In this form, social responsibility is nothing less than a modern, open and flexible way of management. Social responsibility is often seen wrongly as the exclusive responsibility of the brand manager, rather than a common responsibility of all the top managers in a company. This happens because, indeed, many companies started doing social responsibility after being surprised by the answer of the public to some of the aspects of their activities that they didn't see as part of their business responsibilities. For example NIKE had to stand a mass boycott after the media denounced the abusive work practices of some of their suppliers in Indonesia.

In the business practices from small enterprises, the differentiation between management and shareholders is vague and employees have multiple roles and the main activities aim at solving the daily problems, which is done mainly through informal relationships and communication. Also the interpersonal relationships play a very important role.

The uncertainty generated by the pressures of the large companies, the unstable position on the former traditional markets force the small enterprises to create strong partnerships, personal relationships that can offer trust. It will be noticed a tendency of the small enterprises to compensate the instability on the market with an increase of stability of the interhuman relationships, with the employees, the business partners and the clients. The social involvement of the small enterprises leads to an increase of the reputation in the community, to improving the personal image of the owner and of the administrator, and to increasing the trust in the enterprise, to increasing the loyalty towards the company. All these guarantee the stability of the relationships with the business partners, with the employees and the community.

In order to support companies the General Secretariat of the UN has created a program Global Compact which is a partnership between United Nations and companies for attaining a durable development at global level. Global Compact is a network that comprises agencies of the United Nations, companies, union organizations, business organizations, academic organizations, civil society organizations, governmental/administrative institutions and is oriented towards social responsibility on the basis of universal principles, divided in domains of interest and on dimensions: internal and external.

2. The Ethic Investments In It

As soon as the interest of the public towards corporate responsibility increases, there appears and grows considerably a new category of shareholders, who are interested not only in the profitability of their investment, but also in the moral correctness and the social responsibility of the companies in which they have shares. Unlike militant shareholders, the adepts of ethical investments don't use directly their investments for forcing companies to listen to their opinions and take them into consideration. They look for those investments which are in the same time profitable and compatible with certain ethical standards. In Cowton's definition, ethical investments are those that „use ethical, social and ecological criteria for selecting and administrating investment portfolios when it comes to shares of certain companies”.

The criteria for evaluation and selection of the companies can be negative or positive. Those removed from the list of ethical companies are often the companies that produce or trade alcohol,

tobacco, military equipment and any products that are detrimental to the environment or whose production is pollutant and consumes nonrenewable resources. Companies that support oppressive political regimes exploit cheap work labour from poor countries and employ minors; and finally the companies that violate the rights of animals, that endanger biodiversity and those that promote genetic engineering etc

The companies that meet the positive criteria are those that are involved in conserving and protecting the environment, in improving public transportation and living conditions, repairing and conserving buildings and architectural monuments, those that promote „green” energies and those that ensure the equality of chances when promoting employees, work safety conditions etc.

Besides the normative ethic motivation, the ethic investments can be desirable also from a strictly economic point of view. The risks of having the public boycott some products that are not accepted or the risk of ecologic disasters can influence the dynamics of shares and the ethic companies are less exposed to such risks.

On the other side, the success on the market of ethic products can make the investments they finance very attractive. The majority of ethic investment funds make the selection of companies in whose shares are interested starting from the data offered by the market. For example, many corporations from the electronic industry produce household and medical equipment as well as military equipment. In the same time, the investment in bank shares is not safe enough, because banks can finance companies that don't meet the criteria of ethic investors.

In Romania, far from being an ethic undertaking, social responsibility is a possibility of the companies to move the attention of population to legal obligations they should meet in welfare actions. For example a company that is a big polluter advertises for its action of planting trees that it does with volunteers, calling these actions „corporatist social responsibility” and ethic investment.

The *ethic investment* movement spread considerably, with effects that are not negligible. By aiming at investments towards corporations that meet certain moral standards, investors don't exert an influence just on the policies of a certain company, but also stimulates the other corporations to reconsider their ethic behaviour in order to avoid a possible and predictable decrease of their attractiveness on the capital markets in a short term perspective.

3. The Ethics Of The It Workforce

The sensitive personnel problems confronting the multinational IT corporations are the following:

1) The *payment of the employees*, who work for multinational companies in countries with a development level sensibly lower than in their home countries. It is imputed to foreign investors that they exploit the labour from underdeveloped countries, paying a couple of times less expensive the same labour done by employees in their home countries with similar qualifications. On the other side the former are disadvantaged by the fact that, by moving the investment and the production units to the third world, there will be an increase in unemployment in the developed countries. Transnational corporations are fiercely criticized for adopting selfish policies, in the pursuit of maximizing profit, and they break that hypothetical social contract with different categories of shareholders, causing prejudices to employees from their home countries – who lose their work and who's union pressure decreases in intensity when the owner can menace with relocation of investments in other countries – and to employees from the third world – who are exposed to an equivalent work load to those in developed countries but are paid worse. The counter arguments are numerous and powerful. First of all the alternative for the employs in the underdeveloped countries is to have a low pay (compared to the employees from the developed world) or to not be paid at all, as long as the main point of interest for the foreign investors is the low cost of the work force. It can be stated, many times rightly, that the salaries offered by

multinational corporations are sensibly higher than the average from the poor countries in which these companies operate.

Besides the work environment offered by these multinationals is more correct, more civilized and some principles when recruiting and promoting labour are being implanted in the countries from the Third World, thus creating more evolved models for the leadership for treating the workforce.

2) *The management of branches* from other countries of multinational corporations raises a lot of ethic problems. Many companies prefer to offer low credit to local managers, and implant managers from their home countries to the management of local branches. These managers sometimes don't know well enough the traditions of the local problems and are not flexible enough towards the wishes and the difficulties of the partners and the employees from the countries where they are implanted. This is the main reason why, in these last years, multinational corporations adopted a policy of managerial adaptation, and promoted more and more actively local leaders, trained professionally in the west, where they can learn the methods and techniques of modern management.

3) *Women discrimination* is a delicate problem; the investor companies are not necessarily culpable of it, because it is not its managers are those who impose it, but the local traditions and religious beliefs. Multinational corporations are criticized by the public opinion from the origin countries that they are not more determined in having an active policy, even aggressive, for eliminating women discrimination from the Third World, where it represents a hard to combat practice. Other, more reasonable critics, refer to the fact that, in some countries where religion doesn't prevent women from playing a role in economic life, the sexual discrimination takes other forms, as employing mainly women because their salaries are lower than those demanded by men.

4) *Employing minors* is, obviously, the most often incriminated aspect and obviously the most criticable, in terms of personnel problems of the multinational corporations. Thus it is deemed that without the material support of the children employed, their families would lack subsistence means, and those kids would have to choose between dying of hunger and begging, stealing and roving. It is certain that education, health and psychosomatic development of the children that work while still young, are affected, and their future is sombre.

5) *The measures taken to protect* the employees constitute a problem for international companies in terms of their public image in the origin countries and less in the weakly developed countries in which they operate, although it is the employees in poor countries that suffer. In the third world the labour legislation is weakly developed or practically inexistent, thus the standards for protecting the personnel at the work place are very low compared to the developed countries. That's why multinational corporations take much fewer measures for protecting the labour in the branches from the third world as they do, forced by the legislation and by the public opinion. In their origin countries, as a consequence there are many accidents, with victims and grave mutilations of the employees at the work place. They don't reject the idea and take some measures, but not much, invoking profitability and competitiveness. If they spent as much as necessary for the safety of the employees, the costs would increase significantly and if some competitive companies don't take these measures, they risk to be pushed out of the market, which should bring back again the old dramatic dilemma of the workers from the poor countries: risks and low salaries, versus no salaries. All that can be achieved through good intentions is a compromise of the two requirements – the economic and the moral ones.

4. Ethic Controversies Over Environment Protection

This is the battlefield of the most disputes concerning global warming and multinational corporations are the first to be incriminated, because environment destruction, which often claims life's, produce grave, often irreversible effects not only in the countries where they take place,

but they also affect the global climate, the quality of water and air on a global scale. The causes of ecologic destructions are the same as in the case of insufficient employee protection at the work place: the legislation is very permissive, the local population has a low degree of technological competence and doesn't understand the dangers to which it is exposed, the high costs of non-polluting technologies etc.

In fact, the case that brought a focus on international business ethics was the disaster from Bhopal, in India, but the earthquake and the tsunami from Japan, from March 2011 and the explosions at the nuclear power plant from Fukushima is enhancing this discussion. Faced to these phenomena, the reaction and the pressure of the international public opinion have been strong enough to force transnational corporations to accept that they have an obligation to take radical measures for ecologic protection in the countries where the local legislation doesn't impose very high standards, by covering the higher costs that are required by non-polluting technologies as well as by advertising and training the personnel and the population.

Due to the variety of cultural values and moral principles around the planet and because the accommodative policies had unacceptable effects, there appeared more and more strongly the idea of elaborating international ethic codes, with the explicit agreement of government or non-government associations, in which the main role goes to the large transnational corporations.

The International Institute for Business Ethics proposes the following three basic principles for companies:

-**INTEGRATION**: Business ethics has to be implemented in all the aspects of the organizational culture and it has to be reflected in managerial systems. Companies have to start by integrating the ethics in fixing the objectives and the practices for recruiting, employing and promoting the personnel.

-**IMPLEMENTATION**: The ethic behaviour is not just an idea; it is also an effort for implementing a plan for changing the attitude in different activity branches of a corporation. Examples: changing the reward and stimulation systems, promoting better practices for protecting the environment, consulting experts whenever it is required.

-**INTERNATIONALIZATION**: The ever more extended opening towards a global market is necessary for any successful business in the 21st century. It can be achieved through international partnerships, commercial blocks and by implementing GATT agreements or other similar agreements. The clarification of a company's definition of the moral integrity, so that it can transcend national borders, is necessary for any corporation that operates on the global market, and has as result an action plan and an ethic code without a specific cultural colour, which doesn't require essential changes when applied in a global context.

Conclusions:

1. The last decade saw an explosion of ethic behaviour codes of multinational corporations in international business. The majority of these codes are created according to the principles established by OECD (Organization of Economic Cooperation and Development) and ICGN (International Corporate Governance Network). Unfortunately, many of these behaviour codes state vague truisms, and top managers and analysts recognize that there is a lot to be done in implementing the principles declared in these codes in the daily activity of companies that operate on a global level.

2. Many problems are still waiting for a solution that is strongly proofed theoretically and verified in practice. It is important that the most pressing problems have already been formulated and accepted by the community of transnational corporations, which is a lot. Once started, the process of evolution of ethics in international business will continue for sure, in an accelerated rhythm, hopefully with positive results, for more and larger categories of interactive groups in the global economy.

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THE USE OF EXPERT SYSTEMS IN RURAL TOURISM IN MARAMUREȘ

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The existing accommodation in the rural Maramureș region is essential for the development of tourism. Most accommodation units are within the typology of rural tourist hostels, therefore special attention should be paid to promote and diversify their touristic offers. Despite its attractive potential, the rural tourism in Maramureș has its weaknesses because there is no organizational strategy for its deployment. Tour operators must adopt new solutions to promote tourist services, one of which may be using expert systems. The main purpose of this study is to develop a model of an expert system, applying new methodological approaches to the evaluation and ranking of countryside hostels in Maramureș. This model can be easily implemented with private and public entities and could be a source of significant benefits for them.

Scientific literature in the field highlights the benefits of using expert systems in all business sectors and reinforces our conviction that they can be applied extensively in tourism as well.

The research methodology included: defining the nature and scope of the problem, identifying experts, acquiring knowledge, selecting the system building tools, as well as encoding and evaluating the system. In the knowledge acquisition phase we used interviews, thus obtaining a database with information on countryside hostels in Maramureș. We turned to tourism professionals to establish expert rules in a way that reflects as accurately and completely as possible the context. These rules led to the encoding of the system. In order to encode them, we used the Corvid system, developed by Exsys, which was verified and validated.

The system, once designed, provides a user-friendly interface. After being implemented in specialized sites, the system will be able to facilitate searching and finding information by users.

We propose that the model obtained will be a starting point for further research, given that the development environment allows the system to be constantly updated. Using the system will enrich the knowledge database by storing user requirements, and the results thus obtained can be used for statistical calculations useful in determining future development strategies. The implementation of the proposed model in websites, through the assistance it provides, can attract customers both from our country and from the top tourism consumer countries of the European Union and around the world.

Keywords: Expert System , Exsys, Corvid, rural holiday hostels, Maramureș

JEL Classification: C80, C88, L83

I. Introduction

The current development of tourism is characterized by a constant renewal of tourist offers, in particular by developing a new range of tourist products, superior both qualitatively and quantitatively.

Tourism offers a range of intangible services, which tourists do not come into direct contact with at the time of purchase. The main characteristic of tourist products is their enjoyment “at the source”, assuming that tourists travel to it. Buying a product requires prior knowledge of it. The image created in the tourist’s head is critical and this is achieved using means and methods of promotion. The tourism industry needs to rethink the concept of “tourism”, so as to adapt it to highly qualified and therefore, sophisticated audiences. This stems from the fact that the tourist is a demanding customer; his demands are motivated by various reasons and change together with the transformations that human society is subjected to.

The tourist offer is part of an increasingly segmented market where competition becomes increasingly fierce, as the main players on the market are trying new ways to create marketing products and to promote themselves by adopting new strategies.

Recognizing that the Web has become the main means of communication, one solution would be to implement expert systems in web sites, so that online assistance could be offered to potential customers who will be assisted in making such decisions. Human experts are not always available, and many functions that used to depend on direct human contact are now provided via the web. In order to make the best decisions, one needs to take into account the specific needs of each user. Expert systems are the most effective way to manage these situations. The ability to have web sites with "advisors" interacting with the user greatly increases the quality and level of detail of the recommendations that can be provided. A site that provides visitors with expert advice will attract customers and keep them coming in the future to access the site.

Rural Maramureş, by the diversity and complexity of its potential, offers the possibility to practice a wide range of forms of tourism, so that it satisfies tourist needs regardless of the customer segment. But, in order to better meet the desires of tourists travelling to the Maramureş region, it is essential that it should be promoted as well as possible.

As we are convinced of the benefits of expert systems, we can but ask ourselves: ***Will using expert systems improve the promotion of tourist services in the Maramureş County?***

The objective of this paper is to design an expert system to assess rural holiday hostels in the Maramureş County, to help users search for and find information in a fast and efficient way, allowing them to compare offers and choose the best. The system will use a database with complete information about hostels in the area.

II. Literature Review

It is considered that expert systems are those that add the element of artificial intelligence to classic decision support systems. They are the oldest and perhaps the best grounded technology in the field of artificial intelligence (Holsapple and Whinston 1996).

Expert systems (ES) are computer systems that use specialized knowledge to achieve high performance decisions in a particular area (Turban, Sharda and Delen 2011, 542). The main features of expert systems are:

- in conceptual terms, ES are aimed at reconstituting human reasoning according to the expertise obtained from experts;
- ES have the knowledge and capacity to conduct human intellectual activity;
- ES are organized for the acquisition and exploitation of knowledge in a particular area called the problem range;
- ES have ways of invoking knowledge and expressing expertise, behaving as an “intelligent assistant”;
- with respect to their computing organisation method, ES are based on the principle of separation between the data (the database) and the program that treats it (the inference engine);

- ES are able to store knowledge, to establish links between knowledge and to infer conclusions, solutions, advice, tips and the causes of some phenomena from the data and the processing of uncertain knowledge.

Expert systems consist of two environments: **the development environment** and **the consultation environment**. The development environment is used by those who build the system and update it constantly with new knowledge from industry experts and other sources. System users resort to the environment to obtain advice and consultation to solve specific problems (Turban, Sharda and Delen 2011, 550).

The applications of expert systems are increasingly diverse, with multiple roles and places in a variety of areas. The timeliness and speed of problem solving, the ease of use and the consultation in the steps to making the optimal decision actions contribute to their use in virtually all areas of economic and social activity.

Studies on a number of expert systems (Nedovic and Devedzic 2002) have shown that these systems improve customer satisfaction, the quality of products and services, and reduce decision-making time.

Expert systems and the Web are closely connected. One reason for the development of expert systems was their ability to provide recommendations to a large number of users. This potential has been harnessed through the use of expert systems on the web. The costs of their use are minimal, making them very attractive.

The scientific literature highlights the benefits of expert systems and strengthens our belief that the expert system model for evaluating rural accommodation services developed by us will successfully promote their tourist offer in the county of Maramureş.

Currently, the county does not offer to potential tourists the opportunity to obtain information suited to their needs, given that searching and finding information supposes looking over many specialized sites, where information is rather brief (<http://www.cazaremaramures.ro/>; <http://www.turistinfo.ro/zona-maramures/>). The model we suggest can eliminate tedious search and can be implemented with public and private entities (tourism agencies, local councils). The impact carried by the proposed model would be reflected in an increase in the number of tourists in the region and, implicitly, in a more developed rural tourism.

III. Research Methodology

Designing expert systems is a process that includes: defining the nature and scope of the problem, identifying experts, acquiring the database, selecting the system building tool, as well as encoding and evaluating the system (Turban, Sharda and Delen 2011, 566).

Identifying the Nature of the Problem and Defining its Purpose

In our case, the problem is the fact that potential tourists who would like to spend holidays in the Maramureş County cannot find enough information about rural holiday hostels in the area. Our aim would be to provide complete information about the tourism services offered by existing rural hostels.

Identifying Experts

We turned to tourism professionals who knew very well the problems and were willing to help develop the database.

Collection and Representation of Data

The collection phase is aimed at obtaining all the knowledge which is necessary for building the conceptual models and the database. We used the method of interviews, which are frequently used in developing conventional software applications. Unlike them, whose object of study

generally consists of well-defined administrative procedures, human expertise is more difficult to define and extract, which adds to the inherent disadvantages of the interview a degree of uncertainty.

For this reason, we have defined various alternative techniques which consist essentially of applying a controlled method which could identify systematically the cases to be solved and the characteristics on whose grounds the expert formulates decisions and recommendations.

We have obtained the necessary data, which were entered into a spreadsheet (Figure 1).

The knowledge gathered in this stage is not directly usable, it will be structured and expressed in the appropriate form of knowledge according to the knowledge representation methods and the features of the inference engine.

Still in the knowledge acquisition stage will be set the rules underlying the system. Rules should reflect in a most correct and complete way the decision-making context. Rules must be expressed in a way to incorporate the action to be executed when triggered by an event. The most widespread format is the IF-THEN rule.

	A	B	C	D	E	F	G	H	I	J	K	L	
1	Location	Name_of_acomm_unit	Acomm_cost	Places	Ranking	Address	External_aspect	Internal_aspect	Children's_playground	TV	Internet_opportunity	Parking_place	Website_address
2	Barsana	Cerbul_Carpatin	55	14	2_daisies	main_street	undefined	rustic	no	yes	no	no	http://izamaramures.ro/
3	Barsana	Pop	55	6	2_daisies	main_street	modern	rustic	no	yes	yes	no	http://www.informatii-cazare.ro/
4	Barsana	Vila_Barsana	70	54	3_stars	main_street	rustic	rustic	no	yes	da	yes	http://vilabarsana.ro/index.htm
5	Barsana	Cabana_Iza	70	17	3_stars	main_street	rustic	rustic	no	yes	no	no	http://www.barsanamaramures.ro/
6	Barsana	Fratii_Pasca	70	40	3_daisies	main_street	rustic	rustic	yes	yes	no	yes	http://www.fratiiasca.ro/
7	Botiza	Costinar_Aurica	70	20	3_daisies	sec_street	traditional	rustic	yes	yes	yes	yes	http://www.agrotur.ro/aurica/r
8	Budesti	Perla_Cosaului	55	16	2_daisies	main_street	undefined	modern	no	yes	nu	yes	http://pensiuneperlacosaului.ro/
9	Budesti	Poienita	55	28	2_daisies	main_street	modern	modern	no	yes	yes	no	http://www.pensiunepoienita.ro/
10	Chechis	Milena	70	12	3_daisies	main_street	modern	modern	no	yes	no	no	http://www.pensiuneamilena.ro/
11	Coltau	Florilor	70	18	3_daisies	main_street	modern	rustic	no	yes	no	no	http://www.cazaretransilvania.ro/
12	Copalnic	Casa_de_pesto_rau	70	12	3_daisies	sec_street	modern	undefined	no	yes	no	no	http://www.skytrip.ro/pensiun
13	Desesti	Irina	70	8	3_daisies	main_street	modern	modern	no	yes	yes	no	http://www.pensiunearina.ro/
14	Glod	In_Poiana	70	51	3_daisies	sec_street	modern	modern	yes	yes	yes	yes	http://www.pensiunea-inpoian
15	Ieud	Chindris	55	6	2_daisies	sec_street	modern	modern	no	yes	yes	no	http://m.cazarevacanta.ro/cazar
16	Ieud	Casa_Dancus	55	13	2_daisies	main_street	rustic	rustic	no	yes	yes	no	http://www.casadancus.ro/

Figure 2. The database with the characteristics of rural hostels in Maramureş
Source: Screenshot of the Excel spreadsheet

Identifying the Building Tool

We chose the *Corvid* system developed by *Exsys*. This system is an object oriented development platform that involves going through three types of operations: defining variables, building logical blocks and building command blocks.

System Encoding

After the choice of the building tool, our attention is turned to encoding the database, following the syntactic requirements of the chosen system (*Corvid*). In order to find out the stages that need to be followed in the process of building the system, we have resorted to the site of the development tool *Exsys Corvid* (*Exsys Inc 2011*). Our major concern at this stage is to avoid the errors that might occur.

We have followed the following three stages of the *Corvid* system:

- We have defined the variables as in the figure below (Figure 2). Variables are the major factors that intervene in the problem solving process.

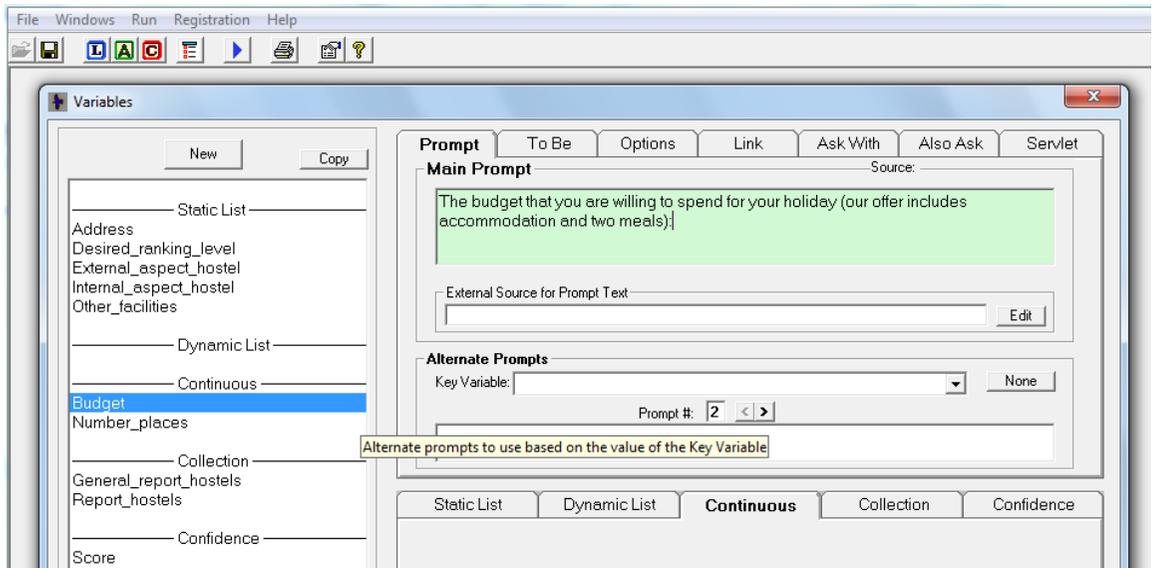


Figure 3. System variables.

Source: Screenshot from the application (Exsys Inc 2011)

We then constructed the logical block (Figure 3) using the decision rules that had been established in collecting and representing knowledge. We chose the MetaBlock option for the logical block. Metablock is a unique feature of Exsys Corvid to build systems that select the best product for an end user, from a group of products based on user preferences and requirements. The Corvid Metablock feature provides a way to write rules in the Corvid system that can be applied to product characteristics which will be stored in a spreadsheet. System variables will be compared with the data in the spreadsheet using IF-THEN rules.

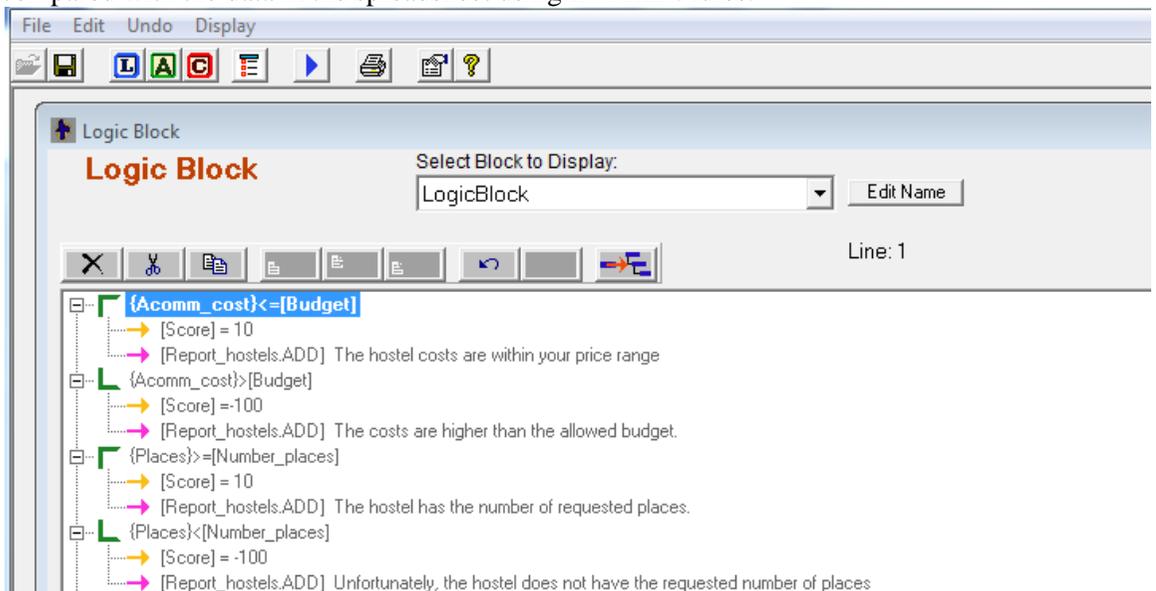


Figure 4. The logical system block.

Source: Screenshot from the application (Exsys Inc 2011)

The last stage in building the system was to define the command block. Command blocks determine how the system will interact with the user, including the order of execution and the user interface (Figure 4).

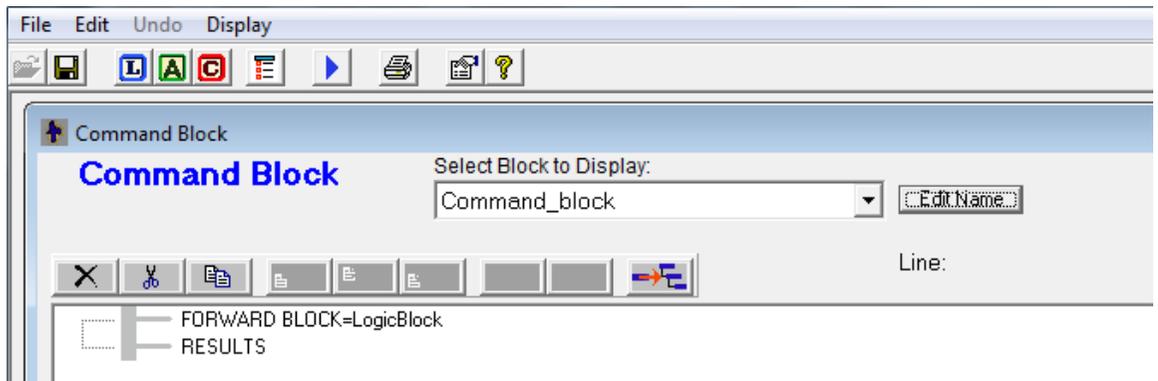


Figure 5. The system command block.
Source: Screenshot from the application (Exsys Inc 2011)

Evaluating the System

After the expert system is built, it must be assessed. Assessment includes verifying and validating the system. The verifying phase ensures that the database knowledge base contains data acquired from the expert and that there are no errors in the encoding phase. Validation confirms that the system can solve the problem correctly.

IV. Research Results

The designed system provides the end-user with a friendly, easy-to-use interface. The system, once implemented in specialized sites, will be able to facilitate searching and finding information by internet users. The expert system will extract from the database, depending on the user choices, the top five hostels, ordered by score (the score is given by proceeding sequentially through the rules of the logical block), supplemented with additional details as text. The result will contain the contact details of recommended hostels, including the webpage, which makes is a link to more detailed information about the hostel.



Figure 6. System recommendations.
Source: Screenshot while running the application (Exsys Inc 2011)

V. Conclusions

Expert systems can play an important role in the evaluation of tourism destinations. By applying IF-THEN scenarios, one can evaluate the benefits of tourist destinations from several points of view and obtain information useful for decision making. Otherwise, a decision is often difficult to make and time consuming for those who intend to choose from the multitude of possible variants, as all conventional methods use a large amount of data and require a long series of calculations.

Our suggested model has proved effective in the testing phase, given that the final result contained useful recommendations, and users can be assured that the result is correct. In this respect, we can say that the expert system has reached the purpose for which it was created.

We suggest that this model should be a starting point for further research. The system development environment can be constantly updated by the system manager to provide comprehensive information system to users (for instance, the knowledge database can be complemented with maps that can provide information on location and access routes to the selected destinations). The knowledge database system grows by storing user requirements. The data obtained in this way can be used to generate statistics on customer behavior and choices, which may contribute to the establishment of rural tourism development strategies.

The solution that we have put forward is a solution for the successful promotion of tourism offers. Owing to the online assistance it offers, its implementation in websites can attract customers from both our country and top tourism consumer countries of the European Union, as well as from anywhere in the world.

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THE USE OF COMPUTER APPLICATIONS IN THE STUDY OF ROMANIA'S PUBLIC DEBT

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Total public debt represents all monetary obligations of the state (government, public institutions, financial, administrative-territorial units) at a time, resulting from internal and external loans (in lei and foreign currencies) contracted on short, medium and long term, and the state treasury and its own obligations for the amounts advanced temporarily to cover the budget deficit. Loans may be contracted by the state through the Ministry of Finance, in his own name or guaranteed by it. Public debt is expressed in local currency or foreign currency, depending on where the contracts and loan conditions. In order to evaluate Romania's public debt, obligations denominated in another currency than the national currency is calculated using the exchange rate of National Bank of Romania. Also, total public debt of a country can be expressed in absolute values (to know the load on that country's economy which is subject to its creditors), the relative values as a percentage of GDP (to allow comparison over time and between countries) and the average size per capita (to allow comparisons and analysis in time and space). Total public debt is calculated and separately manages its two forms, namely domestic public debt and external public debt. Ministry of Finance shall prepare and submit annually to the Government for approval and to Parliament for information, report on public debt, which contains information on government debt portfolio, debt service, public indebtedness indicators and information about primary and secondary market securities state and how to implement the medium-term strategy in managing government debt for the previous year. In order to make comparisons quick and effective on public debt dynamics in Romania, Excel 2010 has new features such as charts and sparkline slicers' features which can help discover trends and statistics in accordance with existing data. The aim of this article is accurate assessment of Romania's public debt and its evolution in the economic crisis in recent years, using computer applications. As a novelty, it is proposed to use charts sparkline (Small diagrams that fit in a cell) to visually summarize data trends in a small space, but in a visual form meaningful and understandable.

Keywords: report on public debt, public debt dynamics, computer applications, professional-looking diagrams, sparkline charts

Cod JEL: H63, L86

Introduction

Public debt is the amount of the debt obligations and local government, which can be expressed in local currency and foreign currency, according to Government Decision no. 132/2011 amending and supplementing the Norms for application of Government Emergency Ordinance no. 64/2007 on public debt, approved by Government Decision no. 1.470/2007 (Popeanga, 2007:

28), and completion of Methodological norms for application of 14 article of no. 64/2007 Government Emergency Ordinance on public debt, approved by Government Decision no. 683/2008 (Dascalu, 2008: 25).

Under pressure from a depleted budget crisis and the need to pay pensions and wages, the Romanian Government came under more and more debt during the previous year. Loans from the IMF, the European Commission and banks on the local market, mostly short term, doubled our debt in the last two years, virtually every government borrowed 1.3 billion per month to cover current expenditure.

Thus, from the public debt of 109.1 billion, equivalent to 21.6% of GDP at the end of 2008, Romania has come to record at the end of 2009, debts of 147.3 billion lei, equivalent to 29.99% of GDP, as on 31 December 2010, the debt reached 193.89 billion lei (37.9% of GDP). If we compare this with the end of October 2010, when public debt was 182.4 billion lei, which accounted for 35.55% of GDP, we conclude that public debt has increased by 2% in just two months, without us entering any loan tranche from the EU.

On 31 January 2011, Romania's total debt decreased by 1.8% from the end of 2010, reaching 190.381 billion lei, which is equivalent to 34.9% of gross domestic product (GDP), estimated at 544, 4 billion. At the same time, 41.9% of total public debt was in lei, 40.8% in euro and the rest in other currencies. Most of the debt was contracted by state loans (38.16%), followed by bonds (18.66%) and Treasury bills (17.9%). Compared to the end of 2010, the share of government debt in total debt declined from 31 January to 1.89 percentage points, from 95.76% to 93.87%, while local government debt represented 6.11% of debt total.

2. Using computer applications in comparative analysis of Romania's public debt in the years 2009-2010

On December 31, 2010, our country's public debt could be characterized by features presented in the table below (Table no. 1):

Table no.1

Indicator	31.12.2010
Total Public Debt * (million)	19389,44
Total Public Debt (% PIB)	37,9
Government Public Debt (% PIB)	94,03
Local Public Debt (% PIB)	5,97
Direct Public Debt (% PIB)	91,92
Publicly guaranteed debt (% PIB)	8,08
Negotiable government debt (% PIB)	41,33
Non-negotiable government debt (% PIB)	58,67
RON (% PIB)	46,21
Euro (% PIB)	42,58
Other currencies (% PIB)	11,21

* includes guaranteed debt of state and local authorities according to GEO 64/2007

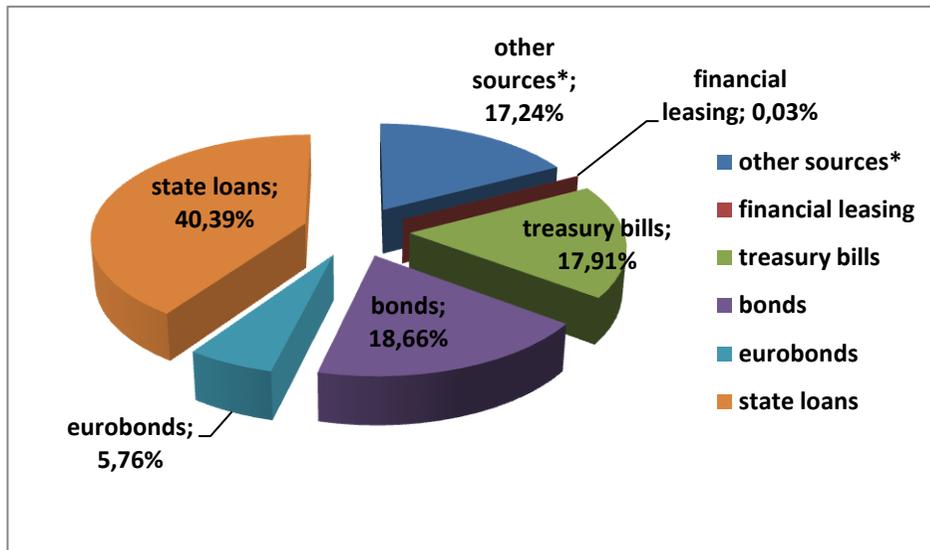
** Updates communicated to the Ministry of Finance

A first analysis shows that public debt maintains a growth trend in both absolute and relative expression. Thus, compared to 31st December 2009, on 31st December 2010 the absolute value of public debt is 565.3 million lei + 46 more or about 11.5 billion euro. And in relative terms there was an increase of + 7.91% of GDP.

In connection with the portfolio of currencies in the basket of public debt, we notice a close ratio between national currency and the euro, but a higher share in total foreign currency than in lei.

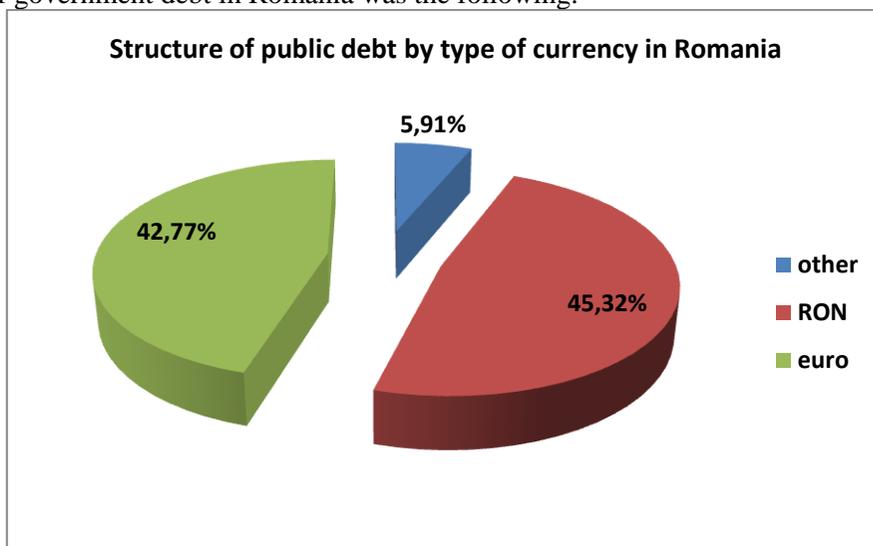
To analyze these data, we can use Excel, creating models for data analysis, while making a presentation of data in several types of professional-looking diagrams (Vătuțiu, 2008: 120). Thus, by types of instruments, on 31st December 2010, the structure of public debt is rendered meaningful by using Excel application:

Public debt structure of Romania on December 31, 2010, by type of instruments

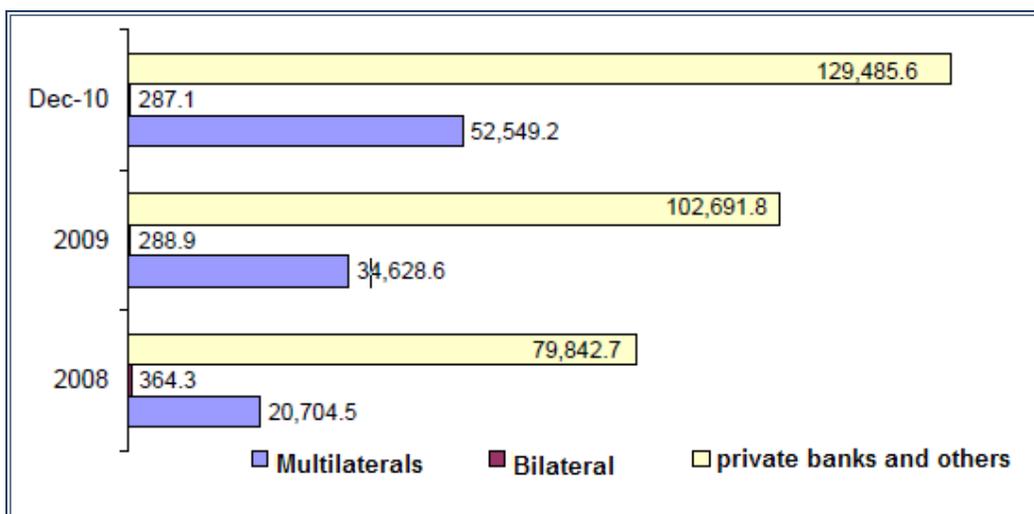


* Availability of loans is the Treasury General Account, used to finance the budget deficit communicated to the Ministry of Finance

One can observe the prevalence of government bonds with a weight of about 40.39% of the total, followed by bonds (18.66%) and T-bills (17.91%). By type of currency at the same time, the structure of government debt in Romania was the following:



By type of holders, the structure of public debt in million, was the following:

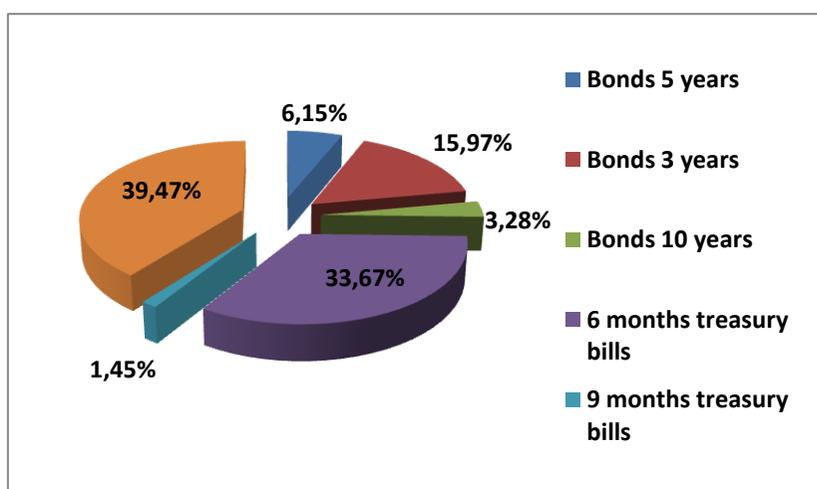


The structure of new public loans contracted during the period January 1, 2010 - December 31, 2010, in million, and is shown in the table below (Table no. 2):

Table no.2

Issuance of domestic bonds	51 912,4
Cash Management Tools	3 050
State loans, of which:	11 347
- contracted directly	5 977,3
- state guaranteed	5 369,8
Total	66 309,5

State Securities issued between 1 January -31 December 2010 by type of maturity were:



A quick look shows that Romania contracts most of its new short-term public debt (almost 34% within 6 months and almost 40% within one year), which will significantly increase annual public financial effort generated by this debt in the current budget year (2011). On the primary

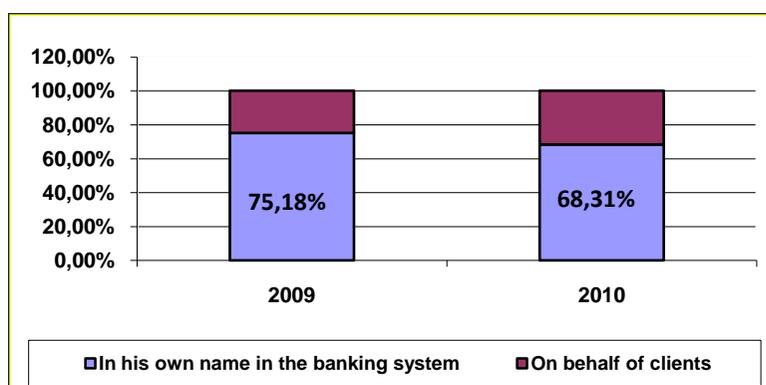
market, in the first half of 2010, issues of public credit instruments (in million) were presented as follows:

Remaining maturity of government securities in ROL million is shown below (Table no. 3):

Table no.3

	31 December 2009	% of total	31 December 2010	% of total
The total amount of which:	46 134	100	66 290	100
short term	25 350	54,95	35 421	53,43
medium	19 489	42,24	28 142	42,45
long term	1 295	2,81	2 727	4,11

Regarding the structure of holders of government securities on the domestic market, on 31st December 2010, the situation was as follows:



Conclusions

Compared to the end of 2009, when it was 147.33 billion lei, which accounted for 30% of GDP, public debt rose by almost 8% of GDP in 2010 (46.6 billion), given that the deficit budget shrank by almost 1% of GDP. This means that public debt has been pressured by loans outstanding in 2010, many of which are rolled in 2011.

In late 2010, government debt represented 94% of public debt, respectively 182.3 billion lei, up by nearly one third (45.8 billion) over the previous end of year.

Government debt contracted by multilateral loans (like the IMF-EU-BM) rose last year with 17.92 billion lei, up to 52.55 billion lei, while the debt contracted through loans from private banks and other lenders increased with 27.9 billion, up to 129.5 billion lei.

Domestic debt has not registered a significant change, increasing with 735 million lei, up to 11.57 billion lei. New loans contracted by the government last year were worth 66.3 billion. In other words, the Romanian Government borrowed on average each month, 5.52 billion lei (1.3 billion euro) to cover current expenses. Romania's debt increased with 46.5 billion during 2010.

As part of the total debt, the government share has increased from 92.65% in 2009 to 94.03% in 2010. Basically, the government debt increased by 45.31 billion lei, to 137 billion lei in 2009 to 182,310,000,000 in 2010. According to the report last year, for 2011 it is scheduled that internal sources will only cover 41.8% of the budget deficit, and below 2% will be covered by privatization receipts and recoveries AVAS. In 2011, the Ministry of Finance expects the government debt service to be 62.7 billion, of which 8.7 billion lei (€ 2 billion) only interest.

However, debt service seems to be much higher than 67 billion (15.8 billion). Most would represent state securities issued in past years that will become due this year, amounting to 42.3

billion lei, which would add to the IMF approved budget deficit - and some 24 billion arrears to be settled. The Government is committed to the foreign creditors not to exceed this year's budget deficit with more than 4.4% of GDP. Loans taken so far by the Romanian State from the IMF and the European Commission will start being returned next year. Until then, one will only pay interest on these loans.

Thus, in 2012 we will refund 124,13 million euro to the IMF, and in 2013 almost 968 million euro, followed by a 1 billion euro refund in 2014.

The year 2015 will be a difficult one, as one will have to refund 157 millions to the IMF, and also a tranche of 1.5 billion euro to the EU. The loan will be repaid to the Commission in 2017 (euro 1.15 billion) and 2019 (EUR 1 billion) too.

To fast track trends and highlight important changes in government debt, you can use new features of visualization and analysis of data from Excel 2010.



The new feature "sparkline Diagrams" provides a compact and clear visual representation of data using small charts assigned to cells on the worksheet. Slicers allow filtering and segmenting PivotTable data in several layers, so that the user can concentrate more on analysis and spend less time on formatting. These new features help one discover patterns or trends in collected data, which could lead to better informed decisions.

In Excel 2010, working on multiple threads helps speed up data retrieval, sorting and filtering rates of PivotTable reports, transforming complexity into clarity with the aid of new visualization tools.

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